# ON AUSTRALIAN ANTHICIDAE (COLEOPTERA).

By ARTHUR M. LEA, F.E.S.

[Read 29th November, 1922.]

Since the publication of Masters' Catalogue, the Australian species referred to this family of small and graceful beetles have been more than doubled, some generic transfers made, synonymy noted, and the known range of many species greatly extended; it has been considered desirable, therefore, to give a list of the known species, with their range, before dealing with some new ones. Of species previously referred to the family Anthicus aberrans Macl., has been transferred to Macratria (Pedilidae) and A. abnormis King to Xylophilus (Xylophilidae), A, melancholicus Lea, as a record of locality only, (Trans. Roy, Soc. S. Aust., 1916, p. 582) was used in error for A. inglorius Lea.

List of known species of Anthicidae and their range in Australia. ANTHICUS Payk.

adelaidae Champ. (N.W. Aust.) albifasciatus Pic. (Ischyropulpus). (Australia)\* albanyensis Pic. (W.A.) (= inflatus Champ.) apicalis King. (Qld.) australis King, non Champ. (Formi- demissus Lea. (N.S.W.) comus). (Old., N.S.W., Vic., Tas., denisoni King. (Qld., N.S.W.) S.A., W.A.) (= walkeri Champ.) baudinensis Champ. (Baudin I.) brevicollis King. (Qld., N.S.W., Vie.) bryanti Pic. (Qld., N.S.W., Vic.) cancellatus Lea. (N.S.W.)

cavifrons Champ. (W.A.) clarki King (Formicomus). (W.A.) (= charon King, var.)

comptus Laf. (N.S.W., S.A.) confertus Lea. (N.S.W.)

constrictus Macl. (Old.)

crassipes Laf. (Qld., N.S.W., Vic., Tas., King I.) crassus King. (N.S.W., Vic., Tas., S.A.,

W.A.)

(= tasmanicus Champ.)

discoideus Champ. (N.W. Aust.)

dubius King. (N.S.W.) elegans Lea (Formicomus). (N.W.

Aust.) exsanguis Pic. (Qld., N.S.W.) (= pallidus Macl.)

floralis Payk. (Qld., N.S.W., Vie., Tas., S.A., W.A., Cent. Aust.)

gawleri King. (N.S.W., S.A., W.A.) geminatus Lea. (Vic., Tas., S.A., W.A.) glaber King. (N.S.W., Vic., Tas., S.A.)

Possibly not really Australian as named originally from South America.

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permutatus Pic. (N.S.W.)

politulus Lea. (N.S.W.)

pulcher King. (N.S.W., S.A.)

(= Micranthicus brachypterus Champ.

(= australis Champ, non King, glabri-

ceps Lea, var.; krefftii Macl., var.; propinguus Macl., pulchrior Lea, var.)

rarus King. (Qld., N.S.W., Vic., Tas.)

rectifasciatus Lea. (Qld., Fitzroy I.)

scabricollis Champ. (Troughton I.) scydmaenoides King. (N.S.W.)

scutellatus Lea. (N.W. Aust.).

(= latus Lea.) pignerator Lea. (N.S.W.)

hackeri Pic. (Australia.) hesperi King. (Qld., N.S.W., Vic., Tas., S.A., W.A.) (= mastersi Macl., similis Lea.) inglorius Lea. (Qld., N.S.W., S.A., posticalis Lea (Formicomus). (N.S.W.) Cent. Aust.) immaculatus King (Vie., S.A.) inornatus Lea. (N.W. Aust.) intricatus King. (W.A.) (= ovipennis Lea,) kingi Macl. (Qld.) kreusleri King. (N.S.W., S.A.) laticollis Macl. (Qld., W.A., N.W. Aust., N.T., Magnetie, Garden, Rottnest and Moa Islands.) (= excavatus Champ., triangularis Lea, var.) leae Pic. (Qld., N.S.W.) (= exiguus Lea, rübriceps Lea.) lemodioides Lea. (N.S.W.) luridus King. (Qld.) macleayi King. (N.S.W., Tas.) monilis King. (N.S.W., S.A., Cent. Aust.) monostigma Champ. (Baudin I.) myrteus King. (Qld., N.S.W., Vie., S.A., unicinctus Cent. Aust.) (== glabricollis King.) nigricollis King. (S.A.) nitidissimus King. (N.S.W., S.A., W.A.) obliquifasciatus King (Formicomus). (N.S.W., Vic.) pallipes Lea (Qld., N.S.W., N.T., Melville I.) paululus Champ. (S.A., W.A., N.W. Aust., N.T.) (= delicatulus Lea.)

segregatus Champ. (E. Wallaby I.) semipunctatus Lea. (Qld., S.A., W.A., N.W. Aust., Cent. Aust.) stenomorphus Champ. (Troughton and Pelsart Islands.) strictus Er. (N.S.W., Vic., Tas., S.A., W.A.) (= bellus King, bembidioides Laf., simulator Lea.) tridentatus Champ. (N.W. Aust.) Champ. (Troughton and Baudin Islands.) unifasciatus King. (Vic., S.A., W.A., Cent. Aust.) villosipennis Lea (Formicomus). (N.S.W., Vic., Tas., W.A.) wollastoni King. (N.S.W., Vic., S.A., Cent. Aust., King I.) xerophilus Lea. (Qld., N.S.W., S.A., W.A., Cent. Aust.)

CRIBROANTHICUS Pic.

frenchi Pic. (Australia.)

Eurygeniomorphus Pic.

rugosus Pie. (Australia.)

# FORMICOMUS Laf.

agilis King. (Qld., N.S.W.) niger Pic. (Australia.) quadrimaculatus King. (Qld., N.S.W., (= humeralis Macl.) cyaneus Hope (Anthelephilus). (Aus-Vic., S.A., W.A., Cent. Aust.) tralia.) rufithorax Pie. (Qld.) senex Laf. (Australia.) denisoni King. (Qld., N.T., N.W. Aust.) (= nigripennis Champ.) speciosus King. (S.A., W.A.) mastersi King. (Qld., N.S.W., S.A.) (= kingi Macl.)

permutatus Pic. (N.S.W.)

politulus Lea. (N.S.W.)

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(= Micranthicus brachypterus Champ.

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rugosus Pie. (Australia.)

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#### Lemodes Boh.

atricollis Oberth. (Vie.) elongata Lea. (Qld., N.S.W.) ecocinea Boh. (Qld., N.S.W., Vie.) splendens Lea. (N.S.W.)

## LEMODINUS Blair.

tumidipennis Blair (Lemodes). (Qld., N.S.W.)

# MECYNOTARSUS Laf.

albellus Pasc. (S.A., W.A.) amabilis Lea. (N.S.W., S.A.) apicipennis Lea. (S.A.) concolor King (S.A.) kingi Mael. (Qld.) kreusleri King. (Qld. N.S.W., S.A.) mastersi Mael. (Qld.) ziczac King. (N.S.W., Vic., S.A., W.A.)

# Notoxus Geoff.

australasiae Laf. (S.A.)

decemnotatus Pic. (Australia.)

# Tomoderus Laf.

denticollis Champ. (N.W. Aust.) vinctus Er. (Tas.) leae Pic. (N.S.W., Vic., S.A.) (= brevicornis Lea.)

# TRICHANANCA Blackb.

concolor King (Anthicus). (N.S.W.) victoriensis Blackb. (N.S.W., Vic.) nigripennis Lea. (N.T.) (= Lemodes corticalis Lea.) pisoniae Lea. (Qld.)

# Walesius Pic.

theresae Pic. (N.S.W.)

## ANTHICUS.

The number of described Australian species of this genus probably represents but a comparatively small proportion of the total to be obtained; although most are of graceful form and many are widely distributed and abundant, oceurring in countless thousands on flowers and frequently coming to lights, occurring on sea-beaches, and frequently washed out by floods, yet their very abundance causes many to be passed over by collectors, on account of their diminutive size rendering certain identification in the field difficult. Some of the more interesting apterous, or at least flightless species, are of very local occurrence, and usually to be obtained only by the use of sieves. Several species have been seen in the nests of ants, but apparently only as casual visitors. King commented on the great variation that occurs in many species of the family. and especially in Anthicus, but did not make sufficient allowance for it, so that when dealing with specimens from widely separated localities, that differed in colour and markings, he sometimes presumed them to be distinct, and hence made several synonyms. In my first two papers, in which members of the family were dealt with, I also regarded and named some varietal forms as distinct species, although, with the exception of a few which had perished, I had examined the whole of King's and Macleay's types. Champion, who had not this advantage when describing the Anthicidae taken by Walker, also made several synonyms. In identifying species from descriptions, unless there are very strong structural features, colour and markings must be relied upon, and hence it is easily possible for an author to fail to identify a species from its

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# Anthicus strictus Er.

Syn.-A, bellus King, A. bembidioides Laf., A. simulator Lea.

A small, widely distributed species, with elytral spots varying in size and intensity, head and prothorax varying in colour, and punctures of prothorax and elytra more sharply defined on some specimens than on others; A. bembidioides has already been referred to the species, and I have now to refer A. bellus and A. simulator to it. On some specimens the postmedian spots are extremely faint and small, being scareely paler than the surrounding parts, and clearly connecting the species with the following variety.

Var. FLAVOHUMERALIS, n. var.

On numerous specimens from South and Western Australia the humeral spots are flavous and sharply defined, and are the only spots on the elytra. The head varies from the same shade of red as the prothorax to almost black.

# ANTHICUS CRASSIPES Laf.

Two males from Cairns, that appear to belong to this species have the elytra of a dingy red, with three large black spots (two median and one apical), and the base slightly infuscated; the hind tibiae are wider than usual, with the notch deeper and shorter, and its beginning and end marked by dentiform processes, although these are quite concealed from some directions.

## ANTHICUS RARUS King.

Syn.—A. australis Champ. (not King), A. glabriceps Lea, A. Kreffti Mael., A. propinquus Mael., A. putchrior Lea.

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BY A. M. LEA. 475

Long series of specimens now convince me that A. glabriceps and A. pulchrior should be regarded as varieties of this variable and widely distributed species; the other synonymy has been previously recorded. Two specimens from the Victorian Alps, and one from Townsville, have the upper surface (except for the two elytral fasciae) black; two from Gayndah are paler than usual, with the elytra pale except for a median fascia and the apex, which are moderately infuscated.

# ANTHICUS LURIDUS King.

This species, one of the allies of A. brevicollis, is common in the Cairns district, and occurs also at Port Denison, Stewart River, Townsville and Cunnamulla. Two females were compared with the type and are entirely pale (the eyes, of course, excepted), seventeen other females are similarly pale; but three males have the abdomen (only) deeply infuscated, especially at the sides, its tip is notched and the hind tibiae are curved (rather strongly so as seen from some directions), the elytra are also less shining than on the female, but are not opaque as on the males of A. crassus, from the pale forms of which it also differs in the less crowded prothoracic punctures. The disproportion between the sexes is so great that it seems probable the males vary in colour, and this appears to be the case, as four males, agreeing perfectly otherwise with the three previously mentioned, each have a moderately infuscated spot on each elytron on the middle of the side. It is almost certain that males with more strongly defined markings (two or three elytral spots) have been described under different names, but as there are no specimens before me marked as having been taken in cop., the names suspected to be varietal are not mentioned. Some specimens from the Northern Territory and North-western Australia appear to be varieties.

# Anthicus crassus King.

Svn.-A. tasmanicus Champ.

This is a widely distributed, abundant, and very variable species, with the short prothorax and general appearance of some specimens of A. brevicollis and of A. crassipes, but with the hind tibiae of the male not notched, although somewhat curved and thicker than on its female. It may, however, be distinguished from those species and from all the allied ones by the elytra of the male, these being distinctly sub-opaque, instead of shining as on other species, and on its own females; its elytral punctures are also less sharply defined than on its own females; the appearance is as if the derm was slightly obscured by gum or grease, but is alike on all the males before me, some of which are taken quite recently. The type of A. crassus was from South Australia, and is a rare form (Form 1) of the male in that State, but the common one in Tasmania; King's second specimen was probably like Form 3, with the prothorax entirely pale; only one specimen was known to Champion, the type of A. tasmanicus. In general, the males are darker than the females, but numerous dark females are darker than some pale males, but, in addition to the elytra and hind tibiae, the sexes may be distinguished by the apical segment of the abdomen, that of the male having a conspicuous curved impression and with coarse punctures in parts, that of the female being even throughout and with small punctures. The under surface and legs vary considerably in colonr, the abdomen usually being black, but often (especially, but not solely, in the female) pale, the metasternum is nearly always black. Disregarding the under surface, antennae and legs, some forms of the male occurring in South Australia are as follows:-

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# Anthicus crassus King.

Svn.-A. tasmanicus Champ.

This is a widely distributed, abundant, and very variable species, with the short prothorax and general appearance of some specimens of A. brevicollis and of A. crassipes, but with the hind tibiae of the male not notched, although somewhat curved and thicker than on its female. It may, however, be distinguished from those species and from all the allied ones by the elytra of the male, these being distinctly sub-opaque, instead of shining as on other species, and on its own females; its elytral punctures are also less sharply defined than on its own females; the appearance is as if the derm was slightly obscured by gum or grease, but is alike on all the males before me, some of which are taken quite recently. The type of A. crassus was from South Australia, and is a rare form (Form 1) of the male in that State, but the common one in Tasmania; King's second specimen was probably like Form 3, with the prothorax entirely pale; only one specimen was known to Champion, the type of A. tasmanicus. In general, the males are darker than the females, but numerous dark females are darker than some pale males, but, in addition to the elytra and hind tibiae, the sexes may be distinguished by the apical segment of the abdomen, that of the male having a conspicuous curved impression and with coarse punctures in parts, that of the female being even throughout and with small punctures. The under surface and legs vary considerably in colonr, the abdomen usually being black, but often (especially, but not solely, in the female) pale, the metasternum is nearly always black. Disregarding the under surface, antennae and legs, some forms of the male occurring in South Australia are as follows:-

 Dark, sometimes black, prothorax usually reddish at base, elytra with a large flavous spot on each shoulder (the typical form).

 Like 1, but elytra with basal third flavous, bounded posteriorly by a dark fascia (often ill-defined), beyond which the derm is again pale, although

not as pale as the basal portion.

- 3. Like 1, but dark parts of elytra consist of a large triangular spot about the middle of each, dilated to the side and with its most acute point directed to the suture. On many specimens of this form the space about the scutellum and apex is more or less obscurely infuscated; the triangles vary considerably in intensity and sharpness of definition.
  - 3a. Elytra as on Form 3 with the markings sharply limited but head, includ-

ing antennae and prothorax entirely pale.

- 4. Like 1, but elytra entirely pale except for an infuscation (invisible from above) on the middle of each side. On many specimens of this form the greater portion of the prothorax is pale.
- 5. Head dark, sometimes only moderately so, prothorax almost or entirely pale, elytra as on Form 4. The most abundant South Australian form of the male.
- Head and prothorax black, elytra pale except narrowly at suture and on sides.
- 7. Upper surface entirely pale, the elytra paler than the head and prothorax, these being pale eastaneous. A rare form which could be easily overlooked from its resemblance to the common form of the female.

The females usually have the upper surface entirely pale, the elytra paler than the head and prothorax, these being of a pale castaneous; but frequently the head is darker (sometimes almost black) than the prothorax; on many of them the abdomen is pale. In general appearance they are close to the females (and sometimes the males) of several other species, and it does not appear to be desirable to number them.

From Victoria I have seen males of Forms 3a, 5 and 7.

- In Tasmania the common form is 1, but the black (as is usual on Tasmanian are stressed compared with those from the mainland) is more intense, the protherax is often entirely black and the flavous spots on the elytra are more strongly contrasted. Form 3 is common, and Form 2 also occurs there. Tasmanian females are usually darker than mainland ones, on many of them the head and prothorax being deep black, and occasionally the sides of the elytra also infuseated.
- In Western Australia, Form 1 is fairly numerous, but the humeral spots are of a dingfer shade than on specimens from South Australia and Tasmania, and the prothorax is usually entirely black; on only two, of the many before me, the basal half of the prothorax is of a rather bright red. Form 2 occurs there but the space beyond the median fascia is more obscure than on South Australian specimens. Form 4 also occurs there, the specimens being usually very dingy. The females usually have the head black, or dark brown, the prothorax reddish or castaneous, and the elytra flavous but with a brownish shade; occasionally the front of the prothorax is infuscated, and on some specimens the sides of the elytra as on Form 4; three females appear at first, except that the elytra are shining, to be rather brightly coloured males of Form 1. I have seen the two following forms of the males only from Western Australia.
- 8. Upper surface entirely black, a faint dilution on the shoulders usually idealing the position of the spots as on Form 1, but even this sometimes entirely absent. A very common form.

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Of a dingy livid colour, the humeral spots somewhat paler than the adjacent parts, but not sharply limited.

From New South Wales I have seen but two males, one of Form 7, and a rather large one of Form 2, with elytral markings more sharply defined than usual.

Six females from Victoria, South and Central Australia probably belong to the species; they are entirely pale except for three feebly infuscated spots on the elytra, the subapical one usually fainter than the others; they resemble some of the paler males of Form 3A; it is possible, however, that they belong to 4. Inticollis

# ANTHICUS OBLIQUIFASCIATUS King, and Allies.

There are three species belonging to this group. 1. A. obliquijasciatus King, 2. A. clarki King (= A. charon King), 3. A. villosipennis Lea, and all (except charon) were originally referred to Formicomus. They are all round-headed and have the elytra strongly narrowed to base, with the intereoxal process of abdomen small and acutely triangular, the femora unarmed, and the hind ones not clavate. The sexes differ considerably in the elytra; on one sex (probably the male) at the base they are slightly wider than the widest part of the prothorax, and shoulders are present although they are strongly rounded; on the other sex they have the sides continuously narrowed to the base, where the width is scarcely greater than that of the base of the prothorax, and decidedly less than its greatest width, and shoulders are absent.

### ANTHICUS LATICOLLIS Macl.

Syn.—A. excavatus Champ., A. triangularis Lea.

The types of A. laticollis have broken bind legs, but the bind tibiae are not notched as on the males of A. crassipes, and A. brevicollis; in colour the elytra agree well with those of the male of the latter, but the antennae are entirely pale, the hind femora are often partly black, but are mostly entirely pale. The species occurs on both sides of the continent, and A. excavatus (of which A triangularis has already been noted as a variety) appears to be a synonym. In general appearance the males of Forms 2 and 3 of A. crassus, with pale bead and prothorax, are searcely to be distinguished from it, except by the subopaque elytra.

# Anthicus stenomorphus Champ.

Fifteen specimens that I took on Pelsart Island and at Geraldton appear to belong to this species, but on only one of them are the dark median and apical markings connected (and that rather narrowly) along the suture; the median fascia varies from about thrice as long as the pale fascia behind it (the pale portions of the elytra are almost white) to but little longer; the infuscation about the base is absent from three specimens but distinct (although of variable extent) on the others; the head varies from no darker than the prothorax to almost black, the under surface also varies considerably in colour. The male differs from the female in having the head slightly larger, the apical segment of abdomen with a shallow depression, the legs stouter, and the front tarsi considerably wider.

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A specimen from Cairns, belonging to this species, differs from the type in having the whole of the upper surface (except for an infuscated elytral fascia just beyond the middle, and a space about the scutellum) flavous, and the legs still paler.

## ANTHICUS BRYANTI Pic.

This beautiful species is common at Cairns and Mount Tambourine in Queensland, and has also been taken at Wollongong (New South Wales) and Ringwood (Victoria). It varies in length from 2 to 3 mm. The depressed part of the derm supporting the sub-basal fascia of silvery pubescence on the clytra is often quite as black as the other parts, but is usually more or less conspicuously reddish; the sub-basal one along the suture, and frequently has a wider prolongation along the suture half-way to the apex.

#### Anthicus pallipes Lea.

In the original description of this species I omitted to mention that the prothorax is opaque, except that the dilated front sides are shining, this giving the "angled" appearance noted, and being a conspicuous feature of the typical form and all the varieties. On the typical form, common at Cairus, the upper surface is black or blackish (the head and prothorax are often dark reddishbrown) and the elytra have two interrupted flavous fasciae: one sub-basal, the other post-median; but the sub-basal one is occasionally continuous, and may even have a slight sutural prolongation towards the base.

Variety A. A still more common form in North Queensland than the typical one, has the upper surface pale, except that on the elytra there is a large dark spot (usually black) on each shoulder, a wide black median fascia, rather narrow near the suture, then strongly dilated and rather abruptly terminated before the sides, and a deeply infuscated fascia near the apex, rather widely connected along the suture with the median one, so as to form a fairly regular x; the tibiae on specimens of this and the following varieties are usually entirely pale. On an occasional specimen (including one from Rockhampton and another from the Blackall Range) the median fascia is dilated so as to occupy almost one-third of the elvtra.

Variety B. A specimen (trapped by sticky seeds of *Pisonia brunoniana* at Kuranda) is pale as in the preceding variety, with the elytral markings reduced to a large blackish spot on each side of the middle, and the humeral and subapical ones to faint infuseations.

VARIETY C. Seven specimens, from Melville Island, are even paler than the trip A, but have the median fascia larger and more dilated to near the sides, along which they are connected with the sub-apical fascia, the connection along the suture is very narrow and faint, so that the resemblance of the dark markings to an x is lost. On two specimens, from Darwin, the pale portion at the tip of the elytra is so obscure that it can scarcely be distinguished from the subapical fascia; on all other specimens of the varieties the tips are conspicuously pale.

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One specimen from Cairns is much smaller (2 mm.) than usual, and is entirely pale, except for three feeble infuscations on each elytron.

#### Anthicus scutellatus Lea.

At first glance the type and other specimens of this species appear to belong to Form 7 of A. crassus, as the elytra, although hardly sub-opaque, are less shining than is usual, but the prothoracic punctures are considerably larger, coarser, and decidedly asperate, those on the head are also much coarser, and occupy more of the surface; the punctures are not as dense as on A. luridus, but are very much coarser.

## ANTHICUS XEROPHILUS Lea.

On an occasional specimen of this species the head is considerably darker than the prothorax, and on the elytra there is a fairly dark infuscation at the base; the notch at the base of the head is more conspicuous on some specimens than on others, and is always present. One specimen was taken at Port Wakefield from a nest of ants of the genus Pheidole.

### Anthicus inglorius Lea.

The male of this species usually has a large, black, medio-lateral patch on each elytron, the patch narrowly continued along the side, almost, in some cases quite, to the apex (on some specimens the black space is so large that two small flavous spots are enclosed near the apex), the abdomen and metasternum are black or blackish, and the femora are sometimes partly infuscated. It has the conspicuously incurved tip of abdomen as in males of most species of the A. breviculis group, and in general appearance males look like large A. breviculis or A. crassips, but the hind tibiae are only slightly bent, and are not at all notched; from A. crassus it is distinguished by the shining elytra. It is a dry-country species, occurring in many parts of the interior of Queensland, New South Wales and South Anstralia.

#### Anthicus geminatus Lea.

The types of this species appear to represent a very rare form of a widely distributed and variable species; the most abundant form is of a rather dingy castaneo-flavous, with somewhat paler antennae, palpi and legs; its elytral markings are seldom sharply limited, and consist of a large infuscated or blackish spot on each side of the middle, and nearer the sides than suture, but the two almost conjoined, on some specimens, so as to appear as a fairly wide median fascia, and a still more obscure apical spot; on very pale specimens the apical spot is usually wanting; on dark specimens there is usually a vague infuscation about the scutellum; the abdomen is usually pale, but on some Victorian and Tasmanian specimens is dark, and occasionally the femora are partly infuscated. The hind tibiae of the male are slightly longer than of the female, and the apical half is somewhat deflected, more noticeably on some specimens than on others. The elytral pubescence is fairly dense and not depressed, but somewhat curled. On an almost equally common form the pubescence is quite flat, the general colour is darker, the markings are less sharply defined, the median and apical spots are occasionally joined along the sides, and the abdomen and usually the metasternum is black or blackish. On these darker specimens the punctures are usually more sharply defined, although they are distinct to the apex on all the One specimen from Cairns is much smaller (2 mm.) than usual, and is entirely pale, except for three feeble infuscations on each elytron.

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Hab.—Western Australia: Bridgetown, Darling Ranges, Beverley, Vasse River; South Australia: Adelaide, Mount Lofty, Mount Gambier, Lucindale, Port Lincoln, Port Augusta; Victoria: Forrest, Geelong, Nelson, Melbourne, Carrum. Cape Otway: Tasmania: Hobart, Jordan River.

# Anthicus flavipennis, n.sp.

Dark red; elytra, legs and palpi flavous. With sparse pale pubescence, and a few upright hairs.

Head oblong-ovate, rather flat, hind angles rounded, base straight across middle, except for a very feeble median notch; with dense and sharply defined punctures, except along middle, which is shining and almost impunctate. Eyes rather small, medio-lateral and prominent. Antennae moderately long and thin Prothorax slightly longer than wide, widest near apex, sides moderately decreasing in width posteriorly and then strongly notched at basal third, a feeble substherenlar elevation on each side of base; with dense and rather large punctures, and with a shallow median line. Elytra much wider than prothorax, shoulders slightly rounded, sides very feebly dilated in middle; with rather numerous, sharply defined punctures about base, becoming smaller and sparser posteriorly, and almost vanishing about apex. Legs, especially the hind ones, rather long and thin. Length, 4.25 mm.

Hab.—South Australia: Miller's Creek (Prof. F. Wood-Jones).

The elytra are without markings, but the species is a very distinct one on account of the coarse punctures of the head and prothorax, the elytral punctures on the basal half are all more or less sharply defined, but even at the base they are decidedly smaller than those on the prothorax. The eyes are slightly longer than the basal joint of antennae, the prothorax is slightly wider than the head; the abdomen is somewhat paler than the rest of the under surface, and its intercoxal process is gently rounded off, although the notch on the metasternum before it is acutely triangular. The type is probably a female.

#### ANTHICUS ACENTETUS, n.sp.

6. Pale castaneous; elytra, antennae, palpi and legs paler (more or less flavous). Elytra moderately elothed with short pale pubescence, rest of upper surface almost glabrous.

Head fairly large, rather convex, oblong-ovate, a narrow impression in middle of base, hind angles moderately rounded off; punctures not very large, but sharply defined and rather dense about eyes, smaller and sparser elsewhere. Eyes moderately large, extending about half-way to neck, medio-lateral, and prominent. Antennae rather long and thin. Prothorax distinctly longer than wide, narrower than head, sides strongly rounded in front and widest at about apical fourth, sides gently decreasing in width posteriorly, and moderately notched near base, a narrow impression traversing extreme base; with fairly dense and sharply defined punctures of moderate size, somewhat sparser along middle than elsewhere, but without a median line. Elytra rather elongate, much wider than prothorax, shoulders gently rounded, sides parallel to near apex; with dense and sharply defined punctures, decreasing in size posteriorly. Apical segment of

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Head oblong-ovate, rather flat, hind angles rounded, base straight across middle, except for a very feeble median notch; with dense and sharply defined punctures, except along middle, which is shining and almost impunctate. Eyes rather small, medio-lateral and prominent. Antennae moderately long and thin Prothorax slightly longer than wide, widest near apex, sides moderately decreasing in width posteriorly and then strongly notched at basal third, a feeble substherenlar elevation on each side of base; with dense and rather large punctures, and with a shallow median line. Elytra much wider than prothorax, shoulders slightly rounded, sides very feebly dilated in middle; with rather numerous, sharply defined punctures about base, becoming smaller and sparser posteriorly, and almost vanishing about apex. Legs, especially the hind ones, rather long and thin. Length, 4.25 mm.

Hab.—South Australia: Miller's Creek (Prof. F. Wood-Jones).

The elytra are without markings, but the species is a very distinct one on account of the coarse punctures of the head and prothorax, the elytral punctures on the basal half are all more or less sharply defined, but even at the base they are decidedly smaller than those on the prothorax. The eyes are slightly longer than the basal joint of antennae, the prothorax is slightly wider than the head; the abdomen is somewhat paler than the rest of the under surface, and its intercoxal process is gently rounded off, although the notch on the metasternum before it is acutely triangular. The type is probably a female.

#### ANTHICUS ACENTETUS, n.sp.

6. Pale castaneous; elytra, antennae, palpi and legs paler (more or less flavous). Elytra moderately elothed with short pale pubescence, rest of upper surface almost glabrous.

Head fairly large, rather convex, oblong-ovate, a narrow impression in middle of base, hind angles moderately rounded off; punctures not very large, but sharply defined and rather dense about eyes, smaller and sparser elsewhere. Eyes moderately large, extending about half-way to neck, medio-lateral, and prominent. Antennae rather long and thin. Prothorax distinctly longer than wide, narrower than head, sides strongly rounded in front and widest at about apical fourth, sides gently decreasing in width posteriorly, and moderately notched near base, a narrow impression traversing extreme base; with fairly dense and sharply defined punctures of moderate size, somewhat sparser along middle than elsewhere, but without a median line. Elytra rather elongate, much wider than prothorax, shoulders gently rounded, sides parallel to near apex; with dense and sharply defined punctures, decreasing in size posteriorly. Apical segment of

abdomen feebly impressed along middle, and notched at apex. Legs rather long, tibiae moderately stout, the bind ones subclavate. Length, 3.25—3.5 mm.

Hab.—Western Australia: Swan River (A. M. Lea).

The colours to a certain extent approach those of A. flavipennis, but the head is more convex, with basal impression more distinct, eyes considerably larger, and punctures much smaller; the prothorax has very different outlines and smaller punctures, and the elytral punctures are much denser and larger; on the elytra at the base they are distinctly larger than on the prothorax, about the middle they are as large as on that segment, but they are minute about the apex. The outlines and general sculpture approach those of A. wollostoni.

# Anthicus castaneoglaber, n.sp.

Shining pale castaneous, legs, antennae and palpi paler. Elytra with sparse, pale pubescence, rest of upper surface glabrous.

Head briefly elliptic, base completely rounded off and not notehed; with sparse and inconspicuous punctures. Eyes small, medio-lateral and prominent. Antennae thin and moderately long. Prothorax distinctly longer than wide, narrower than head across eyes, sides strongly rounded and subglobular in front, notched near base, base slightly more than half the greatest width, and with a few distinct punctures, elsewhere the pinnetures are sparse and minute; median line absent. Elytra rather narrow, much wider than prothorax, gently dilated about middle, shoulders slightly rounded; punctures about hase moderately large and sharply defined, but not crowded, becoming sparser and smaller posteriorly, and scarcely visible on apical slope. Legs moderately long and thin. Length, 3 mm.

Hab .- South Australia: Murray River.

Like A. glaber, on a greatly enlarged scale, but (in addition to size) differs in having the eyes smaller in proportion, prothorax narrower at base, and elytra with sparser punctures. The intercoxal process of the abdomen is rather narrow and its tip is truncated, but the notch on the metasternum is acutely triangular.

#### Anthicus exophthalmus, n.sp.

Rather pale castaneous, legs (knees excepted), antennae and palpi paler.
 With very sparse pubescence, and rather numerous erect or suberect hairs.

Head subquadrate and rather strongly convex, sides almost parallel behind eyes, hind angles slightly rounded, base almost straight; with rather sparse, but mostly sharply defined punctures. Eyes small, very prominent, and distant from base. Antennae rather thin. Prothorax slightly longer than wide, slightly wider than base of head, widest near upex, the sides thence obliquely decreasing to base, with a narrow transverse impression at extreme base; with fairly dense and moderately large, sharply defined punctures. Elytra much wider than prothorax, shoulders slightly rounded, sides feebly dilated to middle; punctures about base slightly larger than on prothorax but less crowded, becoming smaller posteriorly, and almost absent from about apex. Sterna with punctures as on prothorax. Legs moderately long. Length, 2.25—2.5 mm.

Hab.—Queensland: Winton (A. M. Lea).

An entirely pale species, but readily distinguished from A. dubius, A. glaber, and A. pallidus by the longer and more convex prothorax, with much coarser punctures, which are more than twice as large as on dubius and pallidus, and still larger than on glaber; the elytral punctures are also decidedly larger and sparser, and more noticeably decrease in size and density posteriorly, and the clothing is longer and less depressed. The base of the head is notched, but the

abdomen feebly impressed along middle, and notched at apex. Legs rather long, tibiae moderately stout, the bind ones subclavate. Length, 3.25—3.5 mm.

Hab.—Western Australia: Swan River (A. M. Lea).

The colours to a certain extent approach those of A. flavipennis, but the head is more convex, with basal impression more distinct, eyes considerably larger, and punctures much smaller; the prothorax has very different outlines and smaller punctures, and the elytral punctures are much denser and larger; on the elytra at the base they are distinctly larger than on the prothorax, about the middle they are as large as on that segment, but they are minute about the apex. The outlines and general sculpture approach those of A. wollostoni.

# Anthicus castaneoglaber, n.sp.

Shining pale castaneous, legs, antennae and palpi paler. Elytra with sparse, pale pubescence, rest of upper surface glabrous.

Head briefly elliptic, base completely rounded off and not notehed; with sparse and inconspicuous punctures. Eyes small, medio-lateral and prominent. Antennae thin and moderately long. Prothorax distinctly longer than wide, narrower than head across eyes, sides strongly rounded and subglobular in front, notched near base, base slightly more than half the greatest width, and with a few distinct punctures, elsewhere the pinnetures are sparse and minute; median line absent. Elytra rather narrow, much wider than prothorax, gently dilated about middle, shoulders slightly rounded; punctures about hase moderately large and sharply defined, but not crowded, becoming sparser and smaller posteriorly, and scarcely visible on apical slope. Legs moderately long and thin. Length, 3 mm.

Hab .- South Australia: Murray River.

Like A. glaber, on a greatly enlarged scale, but (in addition to size) differs in having the eyes smaller in proportion, prothorax narrower at base, and elytra with sparser punctures. The intercoxal process of the abdomen is rather narrow and its tip is truncated, but the notch on the metasternum is acutely triangular.

#### Anthicus exophthalmus, n.sp.

Rather pale castaneous, legs (knees excepted), antennae and palpi paler.
 With very sparse pubescence, and rather numerous erect or suberect hairs.

Head subquadrate and rather strongly convex, sides almost parallel behind eyes, hind angles slightly rounded, base almost straight; with rather sparse, but mostly sharply defined punctures. Eyes small, very prominent, and distant from base. Antennae rather thin. Prothorax slightly longer than wide, slightly wider than base of head, widest near upex, the sides thence obliquely decreasing to base, with a narrow transverse impression at extreme base; with fairly dense and moderately large, sharply defined punctures. Elytra much wider than prothorax, shoulders slightly rounded, sides feebly dilated to middle; punctures about base slightly larger than on prothorax but less crowded, becoming smaller posteriorly, and almost absent from about apex. Sterna with punctures as on prothorax. Legs moderately long. Length, 2.25—2.5 mm.

Hab.—Queensland: Winton (A. M. Lea).

An entirely pale species, but readily distinguished from A. dubius, A. glaber, and A. pallidus by the longer and more convex prothorax, with much coarser punctures, which are more than twice as large as on dubius and pallidus, and still larger than on glaber; the elytral punctures are also decidedly larger and sparser, and more noticeably decrease in size and density posteriorly, and the clothing is longer and less depressed. The base of the head is notched, but the

notch is very feeble and invisible from above, although fairly distinct from oblique directions; the distance between the eyes and base of antennae is about one-third of that between them and the base of head. The elytra are slightly paler than the head and prothorax.

#### Anthicus ambulans, n.sp.

Pale flavous, parts of sterna and of abdomen infuscated. With sparse, pale pubescence.

Head oblong ovate, hind angles strongly rounded off, base not notehed; punctures sharply defined but not very dense or large. Eyes small, prominent and medio-lateral. Antennae rather thin. Prothorax slightly longer than the greatest width, which is near apex, where the sides are strongly rounded, and the width of head, rather strongly notched near base, which is about half the greatest width; punctures much as on head; median line well-defined on basal half, but vanishing beyond the middle. Elytra elongate-elliptic, shoulders completely rounded off; punctures rather sharply defined, but not erowded on basal half, vanishing posteriorly. Legs rather long and thin. Length, 1.6—1.9 mm.

Hab .- Victoria: Birchip (J. C. Goudie, No. 298).

A minute, pallid species, differing from A. glaber, A. pallidus and A. dubius in being smaller, in the prothorax more strongly narrowed to base, and shoulders completely rounded off. Wings are present, but they are long, thin and without venation (strap-like), totally useless for flight; the wings of the three other species named are fully developed. On one of the specimens examined there are some irregular black spots on the abdomen, but they are probably accidental, or post-mortem ones.

# Anthicus expallidus, n.sp.

Pale flavous, elytra and legs very pale. Clothed with very short pubescence.

Head short and moderately convex, hind angles rounded off, base not notched;
punctures minute. Eyes large, extending to near base. Antennae partly moniliform. Prothorax rather flat, wider than long, widest near apex, sides obliquely
decreasing to a rather deep sub-basel notch, and then less strongly decreasing to
base, a rather wide depression near base and a narrow impression at base;
punctures much as on head; median line very feeble and not continuous. Elytra
somewhat abhreviated, much wider than prothorax, shoulders moderately rounded,
sides almost parallel to near apex; punctures moderately dense about base, but
small and not very sharply defined, vanishing posteriorly. Legs not very long.
Length, 2. 25 mm.

Hab.—New South Wales: Forest Reefs (A. M. Lea).

A pale, depressed species, about the size of A. dubius and A. pallidus, but with much larger eyes, which extend more than half-way to base, those of the species named extending less than half-way; the prothorax is also decidedly shorter and wider (quite as short in proportion as in species of the A. brevicellis group). From some directions the base of the prothorax appears to have two very feeble tubercles. The type has the abdomen quite as pale as the elytra; on a second specimen, except at its tip, it is blackish, and the metastermum is plurest as dark.

#### Anthicus Phaenithon, n.sp.

 $\mathcal{S}.$  Pale flavo-castaneous, legs and antennae paler. Moderately clothed with very short, pale pubescence.  $^{''}$ 

notch is very feeble and invisible from above, although fairly distinct from oblique directions; the distance between the eyes and base of antennae is about one-third of that between them and the base of head. The elytra are slightly paler than the head and prothorax.

#### Anthicus ambulans, n.sp.

Pale flavous, parts of sterna and of abdomen infuscated. With sparse, pale pubescence.

Head oblong ovate, hind angles strongly rounded off, base not notehed; punctures sharply defined but not very dense or large. Eyes small, prominent and medio-lateral. Antennae rather thin. Prothorax slightly longer than the greatest width, which is near apex, where the sides are strongly rounded, and the width of head, rather strongly notched near base, which is about half the greatest width; punctures much as on head; median line well-defined on basal half, but vanishing beyond the middle. Elytra elongate-elliptic, shoulders completely rounded off; punctures rather sharply defined, but not erowded on basal half, vanishing posteriorly. Legs rather long and thin. Length, 1.6—1.9 mm.

Hab .- Victoria: Birchip (J. C. Goudie, No. 298).

A minute, pallid species, differing from A. glaber, A. pallidus and A. dubius in being smaller, in the prothorax more strongly narrowed to base, and shoulders completely rounded off. Wings are present, but they are long, thin and without venation (strap-like), totally useless for flight; the wings of the three other species named are fully developed. On one of the specimens examined there are some irregular black spots on the abdomen, but they are probably accidental, or post-mortem ones.

# Anthicus expallidus, n.sp.

Pale flavous, elytra and legs very pale. Clothed with very short pubescence.

Head short and moderately convex, hind angles rounded off, base not notched;
punctures minute. Eyes large, extending to near base. Antennae partly moniliform. Prothorax rather flat, wider than long, widest near apex, sides obliquely
decreasing to a rather deep sub-basel notch, and then less strongly decreasing to
base, a rather wide depression near base and a narrow impression at base;
punctures much as on head; median line very feeble and not continuous. Elytra
somewhat abhreviated, much wider than prothorax, shoulders moderately rounded,
sides almost parallel to near apex; punctures moderately dense about base, but
small and not very sharply defined, vanishing posteriorly. Legs not very long.
Length, 2. 25 mm.

Hab.—New South Wales: Forest Reefs (A. M. Lea).

A pale, depressed species, about the size of A. dubius and A. pallidus, but with much larger eyes, which extend more than half-way to base, those of the species named extending less than half-way; the prothorax is also decidedly shorter and wider (quite as short in proportion as in species of the A. brevicellis group). From some directions the base of the prothorax appears to have two very feeble tubercles. The type has the abdomen quite as pale as the elytra; on a second specimen, except at its tip, it is blackish, and the metastermum is plurest as dark.

#### Anthicus Phaenithon, n.sp.

 $\mathcal{S}.$  Pale flavo-castaneous, legs and antennae paler. Moderately clothed with very short, pale pubescence.  $^{''}$ 

Head subquadrate, hind angles moderately rounded off, hase moderately notched in middle; punctures small; a feeble longitudinal impression each side in front. Eyes rather small and very prominent. Antennae moderately long and rather thin. Prothorax flat; longer than wide; sides moderately rounded in front, thence oblique to base, with very small punctures. Elytra thin, much wider than prothorax, not quite covering abdomen, shoulders feebly rounded, almost parallel-sided to near apex; with dense and small, but rather sharply defined punctures, becoming very minute posteriorly. Femora moderately stout, the hind ones longer than the others and more clavate, hind tibiae rather short and stout, the front ones notched at about one-third from apex on under surface. Length, 2.5—2.75 mm.

 Differs in having thinner and simple front and hind tibiae, and thinner front tarsi.

Hab.—South Australia (Macleay Museum), Quorn (A. H. Elston).

Probably belongs to the subgenus Micranthicus; from M. pulcher it is distinguished by its larger head with smaller eyes, and by the apparently uniformly coloured elytra which, on close examination, are seen to be slightly darker in the middle than at base or apex, but on pulcher there are two distinctly pale bands, alternating with darker ones, the punctures also are more distinct than on that species. It is about the size of A. pallidus and A. dubius, but is flatter, prothorax with sides (as seen directly from above) evenly oblique to base, instead of curved, punctures of prothorax and elytra smaller, eyes larger, and legs different. The prothorax is decidedly longer than on A. expallidus, and the eyes are considerably smaller. From some directions the prothorax appears to be almost triangular, with its base quite even, but from others a faint subbasal depression may be seen. The hind tibiae of the male from one direction appear to be of only moderate width and notched (or feebly incurved at the middle) on one side, but when viewed at right angles to be rather strongly dilated near the apex, with the upper surface of the dilated portion grooved for the reception of the basal joints of tarsi. Two females from North Western Australia (Fortescue River, W. D. Dodd) appear to belong to this species, but have a somewhat dingier appearance, and the base of the head is more feebly notched.

#### Anthicus homalinotus, n.sd.

Pale castaneo-flavous, elytra and legs still paler. Sparsely and minutely pubescent.

Head short, bind angles slightly rounded, base feebly notehed in middle, punctures sparse and small, but more numerous and distinct (although not large) on a large feeble depression in front. Eyes rather large, extending slightly more than half-way to base. Antennae moderately long, partly moniliform. Prothorax flat, slightly longer than wide, widest near apex, where the sides are strongly rounded, thence oblique to a noteh near base, a shallow depression near base, two very feeble thebreles at base; punctures sparse and minute, but more numerous about base than elsewhere. Elytra much wider than prothorax, leaving part of abdomen exposed, shoulders gently rounded, sides almost parallel; punctures fairly distinct about base, but very indistinct elsewhere. Inter-coxal process of abdomen short and rounded off. Legs moderately long. Length, 2—2,25 mm.

Hab.—Queensland: Townsville (H. H. D. Griffith, from F. P. Dodd).

An unusually pale, flat species, close to A. (Micranthicus) pulcher, but even more fragile-looking, and elytra entirely pale, becoming almost transparent posHead subquadrate, hind angles moderately rounded off, hase moderately notched in middle; punctures small; a feeble longitudinal impression each side in front. Eyes rather small and very prominent. Antennae moderately long and rather thin. Prothorax flat; longer than wide; sides moderately rounded in front, thence oblique to base, with very small punctures. Elytra thin, much wider than prothorax, not quite covering abdomen, shoulders feebly rounded, almost parallel-sided to near apex; with dense and small, but rather sharply defined punctures, becoming very minute posteriorly. Femora moderately stout, the hind ones longer than the others and more clavate, hind tibiae rather short and stout, the front ones notched at about one-third from apex on under surface. Length, 2.5—2.75 mm.

 Differs in having thinner and simple front and hind tibiae, and thinner front tarsi.

Hab.—South Australia (Macleay Museum), Quorn (A. H. Elston).

Probably belongs to the subgenus Micranthicus; from M. pulcher it is distinguished by its larger head with smaller eyes, and by the apparently uniformly coloured elytra which, on close examination, are seen to be slightly darker in the middle than at base or apex, but on pulcher there are two distinctly pale bands, alternating with darker ones, the punctures also are more distinct than on that species. It is about the size of A. pallidus and A. dubius, but is flatter, prothorax with sides (as seen directly from above) evenly oblique to base, instead of curved, punctures of prothorax and elytra smaller, eyes larger, and legs different. The prothorax is decidedly longer than on A. expallidus, and the eyes are considerably smaller. From some directions the prothorax appears to be almost triangular, with its base quite even, but from others a faint subbasal depression may be seen. The hind tibiae of the male from one direction appear to be of only moderate width and notched (or feebly incurved at the middle) on one side, but when viewed at right angles to be rather strongly dilated near the apex, with the upper surface of the dilated portion grooved for the reception of the basal joints of tarsi. Two females from North Western Australia (Fortescue River, W. D. Dodd) appear to belong to this species, but have a somewhat dingier appearance, and the base of the head is more feebly notched.

#### Anthicus homalinotus, n.sd.

Pale castaneo-flavous, elytra and legs still paler. Sparsely and minutely pubescent.

Head short, bind angles slightly rounded, base feebly notehed in middle, punctures sparse and small, but more numerous and distinct (although not large) on a large feeble depression in front. Eyes rather large, extending slightly more than half-way to base. Antennae moderately long, partly moniliform. Prothorax flat, slightly longer than wide, widest near apex, where the sides are strongly rounded, thence oblique to a noteh near base, a shallow depression near base, two very feeble thebreles at base; punctures sparse and minute, but more numerous about base than elsewhere. Elytra much wider than prothorax, leaving part of abdomen exposed, shoulders gently rounded, sides almost parallel; punctures fairly distinct about base, but very indistinct elsewhere. Inter-coxal process of abdomen short and rounded off. Legs moderately long. Length, 2—2,25 mm.

Hab.—Queensland: Townsville (H. H. D. Griffith, from F. P. Dodd).

An unusually pale, flat species, close to A. (Micranthicus) pulcher, but even more fragile-looking, and elytra entirely pale, becoming almost transparent posteriorly; the head is also larger. On the type the sterna are as pale as the legs, and the sides of the abdomen are deeply infuscated, but on a second specimen the sterna and abdomen are of the same shade as the prothorax. From some directions the frontal depression on the head, and its punctures, are scarcely visible, but from others it is quite distinct, and its punctures are sharply defined; on the type it is vaguely connected with the medio-basal notch, but on the other specimen the connection cannot be traced.

# ANTHICUS DOLICHODERES, n.sp.

Pale castaneo-flavous, elytra still paler, apical half of femora slightly infuscated, the metasternum and most of abdomen more deeply so. Sparsely and minutely outsecent.

Head moderately long and subovate, hind angles rather strongly rounded, base not notched; with fairly numerous small punctures, more sharply defined near eyes than elsewhere; median line feeble, a vague oblique impression each side in front. Eyes prominent and rather small, not extending half-way to base. Antennae moderately long. Prothorax much longer than wide, apical two-thirds with sides strongly and almost evenly rounded, notched near base, two feeble elevations at base; with fairly dense and sharply defined punctures near base, sparser and smaller elsewhere. Elytra mach wider than prothorax, shoulders gently rounded, sides dilated posteriorly and rather wide near apex, leaving much of abdomen exposed; punctures fairly dense and distinct about base, but feeble elsewhere. Legs moderately long. Length, 3 mm.

Hab,-Western Australia: Cue (H, W. Brown).

A brachy-elytrous species, readily distinguished from others of the subgenus Micranthicus by its larger size, and much longer and differently-shaped prothorax. The intercoxal process of the abdomen is short and distinctly rounded off; there is a feeble infuscation about the base of the elytra, and a still more feeble one (searcely visible) about apex.

# ANTHICUS PUBIPENNIS, n.sp.

Black or blackish; under surface, legs and antennae of a more or less dull replain paler. Elytra rather densely clothed with short, suberect pubescence, sparser and shorter on head and prothorax.

Head moderately long, subovate, hind angles and base rounded off, the latter not notched; with small, crowded punctures. Eyes small and medio-lateral. Antennae moderately long. Prothorax slightly longer than wide, almost as wide as head across eyes, front angles moderately rounded, sides oblique to a sub-basal incurvature; punctures as on head. Elytra much wider than prothorax, shoulders gently rounded, sides feebly dilated to beyond the middle; with crowded but mostly sharply defined punctures, becoming smaller posteriorly, but traceable even at apex. Intercoxal process of abdomen short, narrow and rounded. Legs moderately long. Length, 2.25—2.5 mm.

Hab.—Queensland: Stewart River (W. D. Dodd), Cairns District (A. M. Lea), Townsville, under seaweed (F. E. Wilson from G. F. Hill).

A black opaque species in general appearance and with outlines much as in A black opaque species in general appearance and with outlines much as in the above the species of the species of the species of the species of the upper surface and, although small and crowded, are mostly sharply defined; they are much the same on the metasternum and abdomen. The apical half of the femora is slightly darker than the basal half. On two specimens the

teriorly; the head is also larger. On the type the sterna are as pale as the legs, and the sides of the abdomen are deeply infuscated, but on a second specimen the sterna and abdomen are of the same shade as the prothorax. From some directions the frontal depression on the head, and its punctures, are scarcely visible, but from others it is quite distinct, and its punctures are sharply defined; on the type it is vaguely connected with the medio-basal notch, but on the other specimen the connection cannot be traced.

# ANTHICUS DOLICHODERES, n.sp.

Pale castaneo-flavous, elytra still paler, apical half of femora slightly infuscated, the metasternum and most of abdomen more deeply so. Sparsely and minutely outsecent.

Head moderately long and subovate, hind angles rather strongly rounded, base not notched; with fairly numerous small punctures, more sharply defined near eyes than elsewhere; median line feeble, a vague oblique impression each side in front. Eyes prominent and rather small, not extending half-way to base. Antennae moderately long. Prothorax much longer than wide, apical two-thirds with sides strongly and almost evenly rounded, notched near base, two feeble elevations at base; with fairly dense and sharply defined punctures near base, sparser and smaller elsewhere. Elytra mach wider than prothorax, shoulders gently rounded, sides dilated posteriorly and rather wide near apex, leaving much of abdomen exposed; punctures fairly dense and distinct about base, but feeble elsewhere. Legs moderately long. Length, 3 mm.

Hab,-Western Australia: Cue (H, W. Brown).

A brachy-elytrous species, readily distinguished from others of the subgenus Micranthicus by its larger size, and much longer and differently-shaped prothorax. The intercoxal process of the abdomen is short and distinctly rounded off; there is a feeble infuscation about the base of the elytra, and a still more feeble one (searcely visible) about apex.

# ANTHICUS PUBIPENNIS, n.sp.

Black or blackish; under surface, legs and antennae of a more or less dull replain paler. Elytra rather densely clothed with short, suberect pubescence, sparser and shorter on head and prothorax.

Head moderately long, subovate, hind angles and base rounded off, the latter not notched; with small, crowded punctures. Eyes small and medio-lateral. Antennae moderately long. Prothorax slightly longer than wide, almost as wide as head across eyes, front angles moderately rounded, sides oblique to a sub-basal incurvature; punctures as on head. Elytra much wider than prothorax, shoulders gently rounded, sides feebly dilated to beyond the middle; with crowded but mostly sharply defined punctures, becoming smaller posteriorly, but traceable even at apex. Intercoxal process of abdomen short, narrow and rounded. Legs moderately long. Length, 2.25—2.5 mm.

Hab.—Queensland: Stewart River (W. D. Dodd), Cairns District (A. M. Lea), Townsville, under seaweed (F. E. Wilson from G. F. Hill).

A black opaque species in general appearance and with outlines much as in A black opaque species in general appearance and with outlines much as in the above the species of the species of the species of the species of the upper surface and, although small and crowded, are mostly sharply defined; they are much the same on the metasternum and abdomen. The apical half of the femora is slightly darker than the basal half. On two specimens the

vague remnant of a median line may be seen on the front of the head, but not on two others.

# ANTHICUS MELAS, n.sp.

Black, shining; base of femora, tibiae and tarsi more or less reddish.

Head moderately long, sides parallel from eyes to hind angles, which are gently rounded off, base searcely visibly notched in middle, a few fairly distinct punctures about a feeble impression each side in front, elsewhere very feeble. Eyes small, prominent and much nearer antennae than base. Antennae feebly dilated towards apex. Prothorax slightly longer than wide, front sides dilated and about one-third wider than base, incurved near base; punctures searcely traceable. Elytra much wider than prothorax, shoulders gently rounded, sides almost parallel to near apex; with rather dense and small punctures, fairly sharply defined about base, but becoming indistinct posteriorly. Legs rather thin. Length, 2 mm.

Hab,—Western Australia: Vasse River (A. M. Lea).

With small eyes distant from base, and general outlines of A. demissus and A. glaber, but body parts entirely black; the outlines are also somewhat as on A. inornatus and A. publipennis, but those species are opaque. The intereoxal process of the abdomen is short and thin, with its tip rounded off, although at the first glame it appears to be triangular.

# Anthicus post-tibialis, n.sp.

Flavous, apical three-fourths of clytra black, abdomen infuscated. Upper surface almost glabrous.

Head round and rather strongly convex, hind angles completely rounded off; a few small punctures in front, but elsewhere without any. Eyes small, medio-lateral and prominent. Antennae moderately long. Prothorax slightly longer than wide, rather convex, sides rather strongly rounded on apical half and suddenly incurved near base; almost impunctate. Elytra much wider than prothorax, shoulders gently rounded, sides almost parallel to near apex, a feeble transverse depression near base; punctures sparse and minute. Intercoxal process of abdomen short and obtusely pointed. Hind tibiae stout. Length, 2.25 mm.

Hab.—Northern Territory: Darwin (W. D. Dodd).

Very distinct by the hind tibiae, which are almost twice as stout as the middle ones, and quite as stout as their supporting femora, the hind tarsi are also decidedly wider than usual. The two colours of the elytra are sharply contrasted, the hind femora and tibiae, middle tibiae and front knees are darker than the rest of the legs. The antennae are thin, with the maximum width of each joint, after the first, almost equal throughout, no joint being distinctly transverse, although the seventh—tenth are each about as wide as long. The type is probably a male.

A specimen from Queensland (Cairns, F: P. Dodd), which is certainly a female (its ovipositor with two terminal setae is protruding) possibly belongs to this species; its hind tibiae are even stouter (they are slightly stouter than their supporting femora), and the antennae are distinctly shorter and wider, the joints after the second slightly but regularly increase in width, with the eighth-tenth distinctly transverse, and beyond the fourth they are distinctly infuscated (entirely pale on the type), the head and prothorax are of a dingy but rather pale red, and the base of the elytra is but obscurely paler than the rest, the transverse impression near its base is rather deeper, and on each side of the

vague remnant of a median line may be seen on the front of the head, but not on two others.

# ANTHICUS MELAS, n.sp.

Black, shining; base of femora, tibiae and tarsi more or less reddish.

Head moderately long, sides parallel from eyes to hind angles, which are gently rounded off, base searcely visibly notched in middle, a few fairly distinct punctures about a feeble impression each side in front, elsewhere very feeble. Eyes small, prominent and much nearer antennae than base. Antennae feebly dilated towards apex. Prothorax slightly longer than wide, front sides dilated and about one-third wider than base, incurved near base; punctures searcely traceable. Elytra much wider than prothorax, shoulders gently rounded, sides almost parallel to near apex; with rather dense and small punctures, fairly sharply defined about base, but becoming indistinct posteriorly. Legs rather thin. Length, 2 mm.

Hab,—Western Australia: Vasse River (A. M. Lea).

With small eyes distant from base, and general outlines of A. demissus and A. glaber, but body parts entirely black; the outlines are also somewhat as on A. inornatus and A. publipennis, but those species are opaque. The intereoxal process of the abdomen is short and thin, with its tip rounded off, although at the first glame it appears to be triangular.

# Anthicus post-tibialis, n.sp.

Flavous, apical three-fourths of clytra black, abdomen infuscated. Upper surface almost glabrous.

Head round and rather strongly convex, hind angles completely rounded off; a few small punctures in front, but elsewhere without any. Eyes small, medio-lateral and prominent. Antennae moderately long. Prothorax slightly longer than wide, rather convex, sides rather strongly rounded on apical half and suddenly incurved near base; almost impunctate. Elytra much wider than prothorax, shoulders gently rounded, sides almost parallel to near apex, a feeble transverse depression near base; punctures sparse and minute. Intercoxal process of abdomen short and obtusely pointed. Hind tibiae stout. Length, 2.25 mm.

Hab.—Northern Territory: Darwin (W. D. Dodd).

Very distinct by the hind tibiae, which are almost twice as stout as the middle ones, and quite as stout as their supporting femora, the hind tarsi are also decidedly wider than usual. The two colours of the elytra are sharply contrasted, the hind femora and tibiae, middle tibiae and front knees are darker than the rest of the legs. The antennae are thin, with the maximum width of each joint, after the first, almost equal throughout, no joint being distinctly transverse, although the seventh—tenth are each about as wide as long. The type is probably a male.

A specimen from Queensland (Cairns, F: P. Dodd), which is certainly a female (its ovipositor with two terminal setae is protruding) possibly belongs to this species; its hind tibiae are even stouter (they are slightly stouter than their supporting femora), and the antennae are distinctly shorter and wider, the joints after the second slightly but regularly increase in width, with the eighth-tenth distinctly transverse, and beyond the fourth they are distinctly infuscated (entirely pale on the type), the head and prothorax are of a dingy but rather pale red, and the base of the elytra is but obscurely paler than the rest, the transverse impression near its base is rather deeper, and on each side of the

base there is a distinct subtubercular elevation, which is much more feeble on the type, the legs are also darker than on the type.

## Anthicus electilis, n.sp.

S. Flavous, elytra (except basal fourth) and abdomen black, head slightly insucated. Elytra sparsely pubescent and with a few bairs, but with a conscieuous band of silvery pubescence where the two colours meet.

Head subglobular, hind angles and base completely rounded off; densely granulate-punctate between eyes, punctate only at hase. Eyes large and mediolateral. Prothorax distinctly longer than wide, distinctly narrower than head, apical two-thirds with strongly rounded sides, strongly notehed near base, with a rather wide depression connecting the notches, median line distinct near apex, and again near base; punctures sparse and inconspicuous. Elytra much wider than prothorax, shoulders gently rounded and oblique inwardly, sides moderately inflated to beyond the middle, with a conspicuous transverse depression near base, on each side of base a prominent subtubercular elevation; punctures sparse and inconspicuous. Intereoxal process of abdomen briefly triangular. Legs rather long, hind femora subclavate, hind tibiae distinctly longer and somewhat thicker than the middle ones, front tibiae slightly dilated on under surface to apical third, and then more strongly narrowed to apex. Length, 2.75 mm.

Hab.—Northern Queensland (Blackburn's collection).

As the femora are stont, but less conspicuously clavate than is usual in Formicomus, the body winged, and the intereoxal process of abdomen somewhat triangular, it seems desirable to refer the species to Anthicus rather than to Formicomus; it appears to connect the former genus (by way of the A. umifasiciatus group) with the latter (by way of the F. agilis group). The colours of the type are somewhat as on the type of the preceding species, but the head is larger, more globular, the inter-antennary space very different, eyes much larger, prothorax longer, elytra more dilated, and hind tibiae much longer and thinner (although stouter than on many species of the genus). The subtubercular elevations at the base of the clytra are quite distinct from above, and very conspicuous from the sides. The two basal joints of the antennae are flavous, the others are missing from the type.

A female (from Cairns) evidently belonging to this species, differs from the type in having the upper surface black, except that the bases of the prothorax and of elytra are very obscurely diluted with red, but the band of silvery pubescence is quite as distinct; its legs are blackish, with the coxac, tarsi and part of the middle tibiae flavous, and the base of the middle femora almost white; its hind legs are somewhat shorter, and front tibiae not dilated near apex; its antennae are long, with the three apical joints black and wider than the others (so that they appear to have a loose, three-jointed elub), the tip of the eighth joint and the base of the first are also infuscated.

## ANTHICUS BILOBICEPS, n.sp.

Reddish-eastaneous, legs somewhat paler, elytra blackish, the apex and a large spot on each shoulder reddish. Elytra with rather dense and short, pale pubescence, rest of upper surface sparsely clothed.

Head subovate, sides behind eyes parallel to near hase, hind angles moderately rounded, base distinctly bilobed; with rather dense punctures, of moderate size and sharply defined. Eyes of moderate size, not extending half-way to base. Antennae rather long and thin, none of the joints transverse. Prothorax ditnetly longer than wide, shightly narrower than head, decidedly convex, sides

base there is a distinct subtubercular elevation, which is much more feeble on the type, the legs are also darker than on the type.

## Anthicus electilis, n.sp.

S. Flavous, elytra (except basal fourth) and abdomen black, head slightly insucated. Elytra sparsely pubescent and with a few bairs, but with a conscieuous band of silvery pubescence where the two colours meet.

Head subglobular, hind angles and base completely rounded off; densely granulate-punctate between eyes, punctate only at hase. Eyes large and mediolateral. Prothorax distinctly longer than wide, distinctly narrower than head, apical two-thirds with strongly rounded sides, strongly notehed near base, with a rather wide depression connecting the notches, median line distinct near apex, and again near base; punctures sparse and inconspicuous. Elytra much wider than prothorax, shoulders gently rounded and oblique inwardly, sides moderately inflated to beyond the middle, with a conspicuous transverse depression near base, on each side of base a prominent subtubercular elevation; punctures sparse and inconspicuous. Intereoxal process of abdomen briefly triangular. Legs rather long, hind femora subclavate, hind tibiae distinctly longer and somewhat thicker than the middle ones, front tibiae slightly dilated on under surface to apical third, and then more strongly narrowed to apex. Length, 2.75 mm.

Hab.—Northern Queensland (Blackburn's collection).

As the femora are stont, but less conspicuously clavate than is usual in Formicomus, the body winged, and the intereoxal process of abdomen somewhat triangular, it seems desirable to refer the species to Anthicus rather than to Formicomus; it appears to connect the former genus (by way of the A. umifasiciatus group) with the latter (by way of the F. agilis group). The colours of the type are somewhat as on the type of the preceding species, but the head is larger, more globular, the inter-antennary space very different, eyes much larger, prothorax longer, elytra more dilated, and hind tibiae much longer and thinner (although stouter than on many species of the genus). The subtubercular elevations at the base of the clytra are quite distinct from above, and very conspicuous from the sides. The two basal joints of the antennae are flavous, the others are missing from the type.

A female (from Cairns) evidently belonging to this species, differs from the type in having the upper surface black, except that the bases of the prothorax and of elytra are very obscurely diluted with red, but the band of silvery pubescence is quite as distinct; its legs are blackish, with the coxac, tarsi and part of the middle tibiae flavous, and the base of the middle femora almost white; its hind legs are somewhat shorter, and front tibiae not dilated near apex; its antennae are long, with the three apical joints black and wider than the others (so that they appear to have a loose, three-jointed elub), the tip of the eighth joint and the base of the first are also infuscated.

## ANTHICUS BILOBICEPS, n.sp.

Reddish-eastaneous, legs somewhat paler, elytra blackish, the apex and a large spot on each shoulder reddish. Elytra with rather dense and short, pale pubescence, rest of upper surface sparsely clothed.

Head subovate, sides behind eyes parallel to near hase, hind angles moderately rounded, base distinctly bilobed; with rather dense punctures, of moderate size and sharply defined. Eyes of moderate size, not extending half-way to base. Antennae rather long and thin, none of the joints transverse. Prothorax ditnetly longer than wide, shightly narrower than head, decidedly convex, sides

strongly rounded in front, becoming oblique towards base, very feebly notehed near base; punctures much as on head. Elytra flat, much wider than prothorax, shoulders slightly rounded, sides almost parallel to near apex, punctures dense and sharply defined, becoming smaller but still distinct posteriorly. Intercoxal process of abdomen briefly triangular. Legs moderately long. Length, 3.5—3.75 mm.

Hab.—Queensland: Cunnamulla (H. Hardcastle).

The two main colours are those of A. Horalis, from which the species differs in having the elytra longer, more parallel-sided, with the tips less rounded, and the punctures and elothing much denser; the prothorax is longer, with the sub-basal incurvature much less pronounced and the antennae longer and thinner. The punctures at the base of the elytra are slightly larger and considerably denser than on the prothorax; the spots on the shoulders occupy about two-thirds of the width of the base. As the abdomen curves to its tip, and the front tarsi are rather wide, the three specimens under examination are probably males.

# Anthicus modicus, n.sp.

Pale flavo-castaneous, legs paler but knees infuscated, elytra partly dark. Upper surface with short, pale pubescence, more distinct on elytra than elsewhere.

Head moderately large, parallel-sided behind eyes to near base, hind angles slightly rounded, base bilobed; with fairly dense and rather sharply defined but not very large punctures, sparser along middle than elsewhere. Eyes rather small, prominent, and much nearer antennae than base. Antennae rather long and partly moniliform. Prothorax longer than wide, greatest width near apex, where the sides are subangularly dilated, slightly wider than the base of head, and almost twice the width of base; punctures rather dense and small, but sharply defined. Elytra much wider than prothorax, shoulders slightly rounded, sides parallel to near apex; with coarse, crowded, asperate punctures about base, rapidly becoming smaller and sparsers, and very minute on apical fourth. Intercoxal process of abdomen briefly triangular. Legs moderately long. Length, 2.75 mm.

Hab.—North Western Australia (Macleay Museum).

About the size of A. floralis, and with somewhat similar outlines, but at once distinguished by the much coarser elytral punctures, these being almost as coarse as on A. semipunctatus (which has the prothorax much narrower and hind tibiae of male armed). At first glance it looks like some of the paler forms of A. wollastoni, but the clytral punctures are slightly coarser at the base, and more rapidly decrease in size, and the markings are very different; it also resembles A. biboliceps, but has much coarser dytral punctures, prothorax shorter, etc. The two colours of the clytra are distinct but not sharply limited; the dark part commences as a subtriangular infuscation about the seutellum and is continued along the suture to the middle when it is suddenly dilated (and becomes much darker) so as almost to touch the margins, but about the tips the colour becomes a dingy red; the abdomen is partly infuscated. As the front tarsi are rather wide the type is probably a male.

## ANTHICUS SORDIDUS, n.sp.

Of a pale, dingy, reddish-eastaneous, legs and antennae paler, head and abdomen infuscated. Upper surface with very short pubescence, more conspicuous on elytra than elsewhere. strongly rounded in front, becoming oblique towards base, very feebly notehed near base; punctures much as on head. Elytra flat, much wider than prothorax, shoulders slightly rounded, sides almost parallel to near apex, punctures dense and sharply defined, becoming smaller but still distinct posteriorly. Intercoxal process of abdomen briefly triangular. Legs moderately long. Length, 3.5—3.75 mm.

Hab.—Queensland: Cunnamulla (H. Hardcastle).

The two main colours are those of A. Horalis, from which the species differs in having the elytra longer, more parallel-sided, with the tips less rounded, and the punctures and elothing much denser; the prothorax is longer, with the sub-basal incurvature much less pronounced and the antennae longer and thinner. The punctures at the base of the elytra are slightly larger and considerably denser than on the prothorax; the spots on the shoulders occupy about two-thirds of the width of the base. As the abdomen curves to its tip, and the front tarsi are rather wide, the three specimens under examination are probably males.

# Anthicus modicus, n.sp.

Pale flavo-castaneous, legs paler but knees infuscated, elytra partly dark. Upper surface with short, pale pubescence, more distinct on elytra than elsewhere.

Head moderately large, parallel-sided behind eyes to near base, hind angles slightly rounded, base bilobed; with fairly dense and rather sharply defined but not very large punctures, sparser along middle than elsewhere. Eyes rather small, prominent, and much nearer antennae than base. Antennae rather long and partly moniliform. Prothorax longer than wide, greatest width near apex, where the sides are subangularly dilated, slightly wider than the base of head, and almost twice the width of base; punctures rather dense and small, but sharply defined. Elytra much wider than prothorax, shoulders slightly rounded, sides parallel to near apex; with coarse, crowded, asperate punctures about base, rapidly becoming smaller and sparsers, and very minute on apical fourth. Intercoxal process of abdomen briefly triangular. Legs moderately long. Length, 2.75 mm.

Hab.—North Western Australia (Macleay Museum).

About the size of A. floralis, and with somewhat similar outlines, but at once distinguished by the much coarser elytral punctures, these being almost as coarse as on A. semipunctatus (which has the prothorax much narrower and hind tibiae of male armed). At first glance it looks like some of the paler forms of A. wollastoni, but the clytral punctures are slightly coarser at the base, and more rapidly decrease in size, and the markings are very different; it also resembles A. biboliceps, but has much coarser dytral punctures, prothorax shorter, etc. The two colours of the clytra are distinct but not sharply limited; the dark part commences as a subtriangular infuscation about the seutellum and is continued along the suture to the middle when it is suddenly dilated (and becomes much darker) so as almost to touch the margins, but about the tips the colour becomes a dingy red; the abdomen is partly infuscated. As the front tarsi are rather wide the type is probably a male.

## ANTHICUS SORDIDUS, n.sp.

Of a pale, dingy, reddish-eastaneous, legs and antennae paler, head and abdomen infuscated. Upper surface with very short pubescence, more conspicuous on elytra than elsewhere. Head moderately long, hind angles and base completely rounded off; with dense and rather small, but sharply defined punctures. Eyes small, prominent, and much nearer antennae than base. Antennae rather long. Prothorax longer than wide, widest near apex, where the width is slightly more than that of head, and almost twice that of base; with dense punctures, slightly larger than on head. Elytra much wider than prothorax, shoulders slightly rounded, sides almost parallel to near apex; with dense punctures, at base about as large as on prothorax, but rather less crowded, and becoming gradually smaller, till at the apex they are much smaller but still quite distinct. Intereoxal process of abdomen briefly triangular. Legs moderately long. Length, 2.5 mm.

Hab,—South Australia: Lucindale (B. A. Feuerheerdt).

At first glance like some of the smaller specimens of A. wollastoni, but head not notched or bilobed at base, prothorax more dilated in front, more strongly narrowed to base, and with denser punctures. In some lights a very faint infuscation or very feeble fascia may be seen across the middle of the elytra. As the front tarsi aer rather wide the type is probably a male.

# Anthicus insignicornis, n.sp.

d. Of a rather dingy flavous, legs paler, elytra with an infuscated median facian and usually a subapical spot, occasionally the markings conjoined. Rather densely elothed with pale pubescence, and with some rather short, upright hairs.

Head rather short, hind angles rather strongly rounded, base feebly incurved to middle but hardly notched; in front with fairly numerous small but sharply defined punctures, less distinct elsewhere. Eyes rather large, hardly more distant from base than from antennae. Antennae with basal joint moderately long, second to sixth small, seventh almost as long as three preceding combined and much wider, ninth slightly shorter than seventh, slightly longer than eighth and distinctly longer than tenth, eleventh at base as wide as the preceding joints, and about as long as the ninth. Prothorax rather short, sides strongly rounded in front and notched near base; with dense and sharply defined punctures of moderate size. Elytra much wider than prothorax, shoulders rather strongly rounded, sides moderately dilated to beyond the middle; punctures about base slightly larger than, but scarcely as dense as on prothorax, becoming smaller posteriorly, but everywhere sharply defined. Intercoxal process of abdomen narrow and subtriangular. Legs thin but not very long. Length, 2.25–2.5 mm.

2. Differs in having the joints of antennae very feebly and regularly in-

creasing in width from near the base.

Hab.—Queensland: Cairns district (F. P. Dodd, C. J. Wild, and A. M. Lea),

Port Douglas (Wild).

At first glance apparently a small species of the A. brevicollis group, but the five apical joints of the male are unusually large, and distinctive from all other Australian members of the family; on two of them the two apical joints are black. The median fascia of the elytra is rather wide, it is sometimes hardly more than a slight infuscation terminated before the margins, but on some specmens is much darker, extends right to the margins, and the margins themselves are narrowly dark almost to the apex; the suture in front of and behind the fascia is usually narrowly infuscated, and the infuscation is sometimes enlarged to a subapical spot; on one female the elytra, except for a large spot on each shoulder, are entirely dark. Seven of the specimens, all males, were removed from sticky seeds of Piconia brunoniana. Head moderately long, hind angles and base completely rounded off; with dense and rather small, but sharply defined punctures. Eyes small, prominent, and much nearer antennae than base. Antennae rather long. Prothorax longer than wide, widest near apex, where the width is slightly more than that of head, and almost twice that of base; with dense punctures, slightly larger than on head. Elytra much wider than prothorax, shoulders slightly rounded, sides almost parallel to near apex; with dense punctures, at base about as large as on prothorax, but rather less crowded, and becoming gradually smaller, till at the apex they are much smaller but still quite distinct. Intereoxal process of abdomen briefly triangular. Legs moderately long. Length, 2.5 mm.

Hab,—South Australia: Lucindale (B. A. Feuerheerdt).

At first glance like some of the smaller specimens of A. wollastoni, but head not notched or bilobed at base, prothorax more dilated in front, more strongly narrowed to base, and with denser punctures. In some lights a very faint infuscation or very feeble fascia may be seen across the middle of the elytra. As the front tarsi aer rather wide the type is probably a male.

# Anthicus insignicornis, n.sp.

d. Of a rather dingy flavous, legs paler, elytra with an infuscated median facian and usually a subapical spot, occasionally the markings conjoined. Rather densely elothed with pale pubescence, and with some rather short, upright hairs.

Head rather short, hind angles rather strongly rounded, base feebly incurved to middle but hardly notched; in front with fairly numerous small but sharply defined punctures, less distinct elsewhere. Eyes rather large, hardly more distant from base than from antennae. Antennae with basal joint moderately long, second to sixth small, seventh almost as long as three preceding combined and much wider, ninth slightly shorter than seventh, slightly longer than eighth and distinctly longer than tenth, eleventh at base as wide as the preceding joints, and about as long as the ninth. Prothorax rather short, sides strongly rounded in front and notched near base; with dense and sharply defined punctures of moderate size. Elytra much wider than prothorax, shoulders rather strongly rounded, sides moderately dilated to beyond the middle; punctures about base slightly larger than, but scarcely as dense as on prothorax, becoming smaller posteriorly, but everywhere sharply defined. Intercoxal process of abdomen narrow and subtriangular. Legs thin but not very long. Length, 2.25–2.5 mm.

2. Differs in having the joints of antennae very feebly and regularly in-

creasing in width from near the base.

Hab.—Queensland: Cairns district (F. P. Dodd, C. J. Wild, and A. M. Lea),

Port Douglas (Wild).

At first glance apparently a small species of the A. brevicollis group, but the five apical joints of the male are unusually large, and distinctive from all other Australian members of the family; on two of them the two apical joints are black. The median fascia of the elytra is rather wide, it is sometimes hardly more than a slight infuscation terminated before the margins, but on some specmens is much darker, extends right to the margins, and the margins themselves are narrowly dark almost to the apex; the suture in front of and behind the fascia is usually narrowly infuscated, and the infuscation is sometimes enlarged to a subapical spot; on one female the elytra, except for a large spot on each shoulder, are entirely dark. Seven of the specimens, all males, were removed from sticky seeds of Piconia brunoniana.

## Anthicus subquadraticollis, n.sp.

Reddish-castaneous, legs and antennae slightly paler, elytra flavous with a large, circular subapical spot, and the margins from about the middle to near the apex black or blackish, the markings sometimes conjoined. Upper surface with short, pale pubescence, indistinct on head and prothorax.

Head subtriangular, hind angles rather prominent but rounded off, base rather strongly incurved to middle; with dense and sharply defined punctures, but almost absent from a shining median line on apical half. Eyes fairly large, extending more than half-way to base. Antennae moderately long and submoniliform. Prothorax slightly longer than wide, apical angles less rounded than usual, sides regularly and (for the genus) rather feebly diminishing in width posteriorly, notched at extreme base; punctures much as near base of head. Elytra much wider than prothorax, shoulders moderately rounded, sides parallel to near apex; punctures much as on prothorax, becoming smaller, but still sharply defined posteriorly. Intereoxal process of abdomen narrow and triangular. Legs moderately long. Length, 1.76—2.5 mm.

Hab.—Queensland: Townsville (A. M. Lea).

A subopaque species (owing to very fine shagreening), at first glance apparently of the A. brevicollis group, but prothorax less strongly narrowed posteriorly than is usual in the genus, so that its base is hardly one-third narrower than its apex. Excluding the eyes, the head appears conspicuously triangular, its median line is distinct in front on all the specimens, and on some of them is traceable, but very narrow, to the base. The smaller specimens have the front tarsi wider, and the apical segment of abdomen less evenly convex than on the larger ones, and are probably males; one of them has the abdomen rather deeply infruscated. I know of no closely allied species.

### ANTHICUS EMINENS, n.sp.

Black; head and under surface dark red, coxae and tarsi flavous, antennae dull red, the basal and some of the apical joints blackish or deeply infuscated. Moderately clothed with not very short pubescence, and with numerous long, suberect hairs; the elytra with two pubescent fasciae (the derm beneath them somewhat reddish): one near the base, the other bevond the middle.

Head rather short, hind angles strongly rounded, base straight in middle; with crowded and somewhat asperate punctures. Eyes rather small and very prominent, distinctly nearer antennae than base. Antennae moderately long. Prothorax longer than wide, more convex than usual, sides strongly rounded near apex and strongly narrowed to base, distinctly notched near hase; with crowded punctures, somewhat rougher than on head. Elytra much wider than prothorax, shoulders gently rounded, sides feebly dilated to beyond the middle, with a transverse depression (supporting the first fascia) near base; punctures moderately large and sharply defined even at apex, but much less crowded than on prothorax. Intereoxal process of abdomen narrow and triangular. Legs moderately long. Length, 2.5 mm.

Hab.—Queensland: Coen River (W. D. Dodd).

With two pubescent fasciae on the elytra much as on A. bryanti, but head and prothorax with much coarser punctures, elytra with sharply defined ones (on bryanti they are much sparser and scarcely visible), head entirely red, etc. The head and prothorax are opaque; from some directions the hind angles of the former appear to be shining, owing to the punctures there being sparser than elsewhere. On a second specimen the prothorax is of the same dull red colour as the head.

## Anthicus subquadraticollis, n.sp.

Reddish-castaneous, legs and antennae slightly paler, elytra flavous with a large, circular subapical spot, and the margins from about the middle to near the apex black or blackish, the markings sometimes conjoined. Upper surface with short, pale pubescence, indistinct on head and prothorax.

Head subtriangular, hind angles rather prominent but rounded off, base rather strongly incurved to middle; with dense and sharply defined punctures, but almost absent from a shining median line on apical half. Eyes fairly large, extending more than half-way to base. Antennae moderately long and submoniliform. Prothorax slightly longer than wide, apical angles less rounded than usual, sides regularly and (for the genus) rather feebly diminishing in width posteriorly, notched at extreme base; punctures much as near base of head. Elytra much wider than prothorax, shoulders moderately rounded, sides parallel to near apex; punctures much as on prothorax, becoming smaller, but still sharply defined posteriorly. Intereoxal process of abdomen narrow and triangular. Legs moderately long. Length, 1.76—2.5 mm.

Hab.—Queensland: Townsville (A. M. Lea).

A subopaque species (owing to very fine shagreening), at first glance apparently of the A. brevicollis group, but prothorax less strongly narrowed posteriorly than is usual in the genus, so that its base is hardly one-third narrower than its apex. Excluding the eyes, the head appears conspicuously triangular, its median line is distinct in front on all the specimens, and on some of them is traceable, but very narrow, to the base. The smaller specimens have the front tarsi wider, and the apical segment of abdomen less evenly convex than on the larger ones, and are probably males; one of them has the abdomen rather deeply infruscated. I know of no closely allied species.

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Head rather short, hind angles strongly rounded, base straight in middle; with crowded and somewhat asperate punctures. Eyes rather small and very prominent, distinctly nearer antennae than base. Antennae moderately long. Prothorax longer than wide, more convex than usual, sides strongly rounded near apex and strongly narrowed to base, distinctly notched near hase; with crowded punctures, somewhat rougher than on head. Elytra much wider than prothorax, shoulders gently rounded, sides feebly dilated to beyond the middle, with a transverse depression (supporting the first fascia) near base; punctures moderately large and sharply defined even at apex, but much less crowded than on prothorax. Intereoxal process of abdomen narrow and triangular. Legs moderately long. Length, 2.5 mm.

Hab.—Queensland: Coen River (W. D. Dodd).

With two pubescent fasciae on the elytra much as on A. bryanti, but head and prothorax with much coarser punctures, elytra with sharply defined ones (on bryanti they are much sparser and scarcely visible), head entirely red, etc. The head and prothorax are opaque; from some directions the hind angles of the former appear to be shining, owing to the punctures there being sparser than elsewhere. On a second specimen the prothorax is of the same dull red colour as the head.

#### ANTHICUS ACANTHODERES, n.sp.

Dark red, antennae, palpi and legs paler, prothorax blackish, elytra with a black median fascia. Elytra moderately densely clothed with suberect, pale pubescence, sparser and depressed elsewhere.

Head (excluding eyes) subtriangular, hind angles moderately rounded, base distinetly bilobed; with a narrow, shining, continuous median line, ending in a basal notch; with crowded but rather sharply defined punctures. Eyes small, very prominent, distant from base. Antennae thin but not very long, submoniliform. Prothorax longer than wide, each side (at its widest) with an acute tuberele projecting outwards at right angles, a short distance behind it a feeble angulation, and then strongly narrowed to near base; punctures even more crowded than on head; with a vague trace of a median line near base. Elytra much wider than prothorax, shoulders gently rounded, sides parallel to beyond the middle; with dense (but not crowded) sharply defined punctures, becoming smaller posteriorly, but distinct even at apex. Intercoxal process of abdomen briefly triangular. Lees moderately long. Lenth 2,75 mm.

Hab .- Queensland: Cunnamulla (H. Hardcastle).

Readily distinguished from all other Australian species of the genus except
Australian species of the genus except
Australian species by the conspicuously armed
prothorax. From scabricollis and scydmaenoides it is distinguished by the unifasciate elytra, with square shoulders and from the description of tridentatus by
the unifasciate elytra and prothorax with less than three tubercles on each side.
In some lights the elytral pubescence appears golden.

### Anthicus trivittipennis, n.sp.

Piceous-brown, head black or blackish, under surface usually paler than prohorax; elytra flavous, its base, paex, sides, suture and a dilated postmedian spot (or abbreviated fascia) on the suture more or less deeply infuseated; antennae with basal half or less flavous, the rest infuseated; palpi and legs flavous, the knees slightly infuseated. Elytra rather densely clothed with short, pale pubsecence, rest of upper surface almost glabrous.

Head rather short, hind angles moderately rounded off, base bilobed; surfage very finely sbagreened and with rather distinct but irregularly distributed punctures. Eyes large, extending more than half-way to base. Antennae rather thin, none of the joints (except the ninth and tenth in the female) transverse. Protonax flat, sides strongly rounded near apex, and oblique (with a moderate subbasal incurvature) to base, median line faintly impressed; surface shagreened, and with rather dense but not sharply defined punctures. Elytra much wider than prothorax, shoulders slightly rounded, sides gently dilated to beyond the middle; with fairly dense and sharply defined punctures of moderate size near base, becoming indistinct posteriorly. Intereoxal process of abdomen acutely triangular, apical segment smaller and less evenly convex in male than in female. Less moderately lone; Length 3.25—4 mm.

Hab.—Queensland: Cairns (E. Allen).

A flat species with head and prothorax opaque and elytral markings longitudinal; it is not close to any other described Australian one, but some specimens strikingly resemble Dromius humeralis (of the Carabidae) in miniature. Of seven specimens taken by Mr. Allen six have the postmedian enlargement of the sutural infuscation rather large, and with faint infuscations connecting it with the dark margins, and three of these have the apical infuscation more extensive than on the other three; the seventh specimen has the elytra dark (almost black), except for a larger, round, flavous spot on each side near the apex.

#### ANTHICUS ACANTHODERES, n.sp.

Dark red, antennae, palpi and legs paler, prothorax blackish, elytra with a black median fascia. Elytra moderately densely clothed with suberect, pale pubescence, sparser and depressed elsewhere.

Head (excluding eyes) subtriangular, hind angles moderately rounded, base distinetly bilobed; with a narrow, shining, continuous median line, ending in a basal notch; with crowded but rather sharply defined punctures. Eyes small, very prominent, distant from base. Antennae thin but not very long, submoniliform. Prothorax longer than wide, each side (at its widest) with an acute tuberele projecting outwards at right angles, a short distance behind it a feeble angulation, and then strongly narrowed to near base; punctures even more crowded than on head; with a vague trace of a median line near base. Elytra much wider than prothorax, shoulders gently rounded, sides parallel to beyond the middle; with dense (but not crowded) sharply defined punctures, becoming smaller posteriorly, but distinct even at apex. Intercoxal process of abdomen briefly triangular. Lees moderately long. Lenth 2,75 mm.

Hab .- Queensland: Cunnamulla (H. Hardcastle).

Readily distinguished from all other Australian species of the genus except
Australian species of the genus except
Australian species by the conspicuously armed
prothorax. From scabricollis and scydmaenoides it is distinguished by the unifasciate elytra, with square shoulders and from the description of tridentatus by
the unifasciate elytra and prothorax with less than three tubercles on each side.
In some lights the elytral pubescence appears golden.

### Anthicus trivittipennis, n.sp.

Piceous-brown, head black or blackish, under surface usually paler than prohorax; elytra flavous, its base, paex, sides, suture and a dilated postmedian spot (or abbreviated fascia) on the suture more or less deeply infuseated; antennae with basal half or less flavous, the rest infuseated; palpi and legs flavous, the knees slightly infuseated. Elytra rather densely clothed with short, pale pubsecence, rest of upper surface almost glabrous.

Head rather short, hind angles moderately rounded off, base bilobed; surfage very finely sbagreened and with rather distinct but irregularly distributed punctures. Eyes large, extending more than half-way to base. Antennae rather thin, none of the joints (except the ninth and tenth in the female) transverse. Protonax flat, sides strongly rounded near apex, and oblique (with a moderate subbasal incurvature) to base, median line faintly impressed; surface shagreened, and with rather dense but not sharply defined punctures. Elytra much wider than prothorax, shoulders slightly rounded, sides gently dilated to beyond the middle; with fairly dense and sharply defined punctures of moderate size near base, becoming indistinct posteriorly. Intereoxal process of abdomen acutely triangular, apical segment smaller and less evenly convex in male than in female. Less moderately lone; Length 3.25—4 mm.

Hab.—Queensland: Cairns (E. Allen).

A flat species with head and prothorax opaque and elytral markings longitudinal; it is not close to any other described Australian one, but some specimens strikingly resemble Dromius humeralis (of the Carabidae) in miniature. Of seven specimens taken by Mr. Allen six have the postmedian enlargement of the sutural infuscation rather large, and with faint infuscations connecting it with the dark margins, and three of these have the apical infuscation more extensive than on the other three; the seventh specimen has the elytra dark (almost black), except for a larger, round, flavous spot on each side near the apex.

### ANTHICUS TRICOLORICORNIS, n.sp.

Reddish-eastaneous; elytra flavous, with a rather narrow, blackish, median fascia not quite touching suture or sides; legs pale flavous, femora partly infuscated; antennae with basal joints reddish, the median ones blackish, the apical ones whitish. Elytra with fairly dense, subdepressed, pale pubescence, and with numerous erect hairs, rest of upper surface with sparser pubescence and shorter hairs.

Head short and convex, hind angles strongly rounded, base not notebed; punctures sparse and seareely visible. Eyes moderately large almost as near base as antennae. Antennae rather long, fifth and sixth joints moderately transverse, seventh to ninth strongly so. Prothorax longer than wide, sides of apical two-thirds strongly rounded and much wider than basal third, near base strongly constricted, the constriction continuous across disc; with distinct punctures in constriction, but sparse and small elsewhere. Elytra convex, elliptic-ovate, shoulders completely rounded off, near middle fully twice the width of prothorax; punctures sharply defined but nowhere dense, of moderate size near base, becoming smaller posteriorly. Intereoxal process of abdomen rather narrow and subtriangular. Legs moderately long. Length, 2.25 mm.

Hab.—Queensland: Mount Tambourine (A. M. Lea).

A beautiful and apparently apterous species, which possibly should have been referred to Tomoderus, but as there is no trace of a median line on the prothorax it was considered better to place it in Anthicus; the elytra are fasciate as in the description of the Tasmanian T. vinctus, but the antennae are triceloured, and prothorax different. The three colours of the antennae are very distinct, but not sharply limited, thus the two apical joints are almost white, but the ninth is rather pale at its tip, and the fourth has its tip infuscated.

A second specimen (from Cooktown, H. J. Carter) differs from the type in being somewhat wider, elytra slightly infuscated at the base, its median fascia wider (but also not touching suture or sides) and punctures larger, denser and much more sharply defined; antennae with three apical joints entirely pale, and femora not infuseated.

# Anthicus herus, n.sp.

Black or dark piecous-brown, elytra with two flavous fascine, metasternum, part of abdomen, legs (femora sometimes deeply infuseated or blackish, except at base) and antennae dark reddish, tarsi and palpi paler. Elytra with rather dense and short, pale pubescence, shorter and less distinct on rest of upper surface.

Head rather short, hind angles and base gently rounded, the latter not notched; with erowded, asperate punctures, but leaving a narrow, shining median line. Eyes rather large and prominent, extending more than half-way to base. Antennae rather long, ninth and tenth joints feebly transverse. Prothorax slightly longer than greatest width, sides strongly rounded and widest near apex, where they are fully twice as wide as base, and slightly wider than head across eyes, strongly incurved near base; punctures much as on head. Elytra elongate, much wider than prothorax, shoulders moderately rounded, sides almost parallel to near apex; with crowded but sharply defined punctures, becoming smaller posteriorly. Intereoxal process of abdomen triangular. Legs rather long, the hind ones longer than the others, femora stout, especially the front pair. Length, 3.75—4.5 mm.

Hab.—Queensland: Townsville (F. P. Dodd).

### ANTHICUS TRICOLORICORNIS, n.sp.

Reddish-eastaneous; elytra flavous, with a rather narrow, blackish, median fascia not quite touching suture or sides; legs pale flavous, femora partly infuscated; antennae with basal joints reddish, the median ones blackish, the apical ones whitish. Elytra with fairly dense, subdepressed, pale pubescence, and with numerous erect hairs, rest of upper surface with sparser pubescence and shorter hairs.

Head short and convex, hind angles strongly rounded, base not notebed; punctures sparse and seareely visible. Eyes moderately large almost as near base as antennae. Antennae rather long, fifth and sixth joints moderately transverse, seventh to ninth strongly so. Prothorax longer than wide, sides of apical two-thirds strongly rounded and much wider than basal third, near base strongly constricted, the constriction continuous across disc; with distinct punctures in constriction, but sparse and small elsewhere. Elytra convex, elliptic-ovate, shoulders completely rounded off, near middle fully twice the width of prothorax; punctures sharply defined but nowhere dense, of moderate size near base, becoming smaller posteriorly. Intereoxal process of abdomen rather narrow and subtriangular. Legs moderately long. Length, 2.25 mm.

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Hab.—Queensland: Townsville (F. P. Dodd).

A large, flat, opaque species; to the naked eye, on account of the elytral markings, suggestive of a greatly enlarged form of A. myrteus, but not even close to that species. Of the pale elytral fasciae the first, ending at the basal third, appears to be of the nature of two isosceles triangles, fairly wide on the sides and narrowed towards the suture, which they do not reach; the space between them and the base in consequence is widely triangular (on two specimens it is of a dark dingy red); the second fascia is at the apical third, very feebly curved, terminated before the sides and very narrowly interrupted at the suture. The punctures on the under surface of the head and prothorax are even coarser than on the upper surface; the elytral punctures at the base are not quite as large as those on the prothorax, but they are more sharply defined. The male differs from the female in having the head and prothorax smaller, abdomen smaller and less evenly convex, with the apical segment shorter, and its tip incurved, the front femora are stouter (although they are very stout in the female) and the front tarsi are a trifle wider.

#### ANTHICUS IMITATOR, n.sp.

Deep shining black, two elytral fasciae, coxae and tarsi flavous, or reddishflavous. Elytra moderately clothed with short, ashen pubescence, rest of upper surface more soursely clothed.

Head subovate, quite semicircular beyond eyes, base not notched; with fairly dense and sharply defined punctures of moderate size, sparser along middle than elsewhere. Eyes moderately large, medio-lateral and very prominent. Antennae rather long and thin. Prothorax slightly longer than wide, sides strongly rounded in front, where the width is about equal to that of head across eyes, and is almost twice that of base, strongly constricted near base, the constriction traceable across disc; punctures much as on prothorax, but more crowded and less sharply defined in sub-basal depression, median line traceable as a narrowly impressed line towards base, as a slightly shining one towards apex. Elytra much wider than prothorax, shoulders moderately rounded, sides almost parallel to near apex. feebly transversely impressed near base; punctures sharply defined, rather dense, but not crowded near base, becoming smaller posteriorly. Intereoxal process of abdomen obtusely pointed. Length, 3—3.5 mm.

Hab.—South Australia: Lucindale (B. A. Feuerheerdt), Port Lincoln (Rev. T. Blackburn), Kangaroo Island (J. G. O. Tepper); Western Australia: Beverley (E. F. du Boulay), Swan River (A. M. Lea).

A deep black species with elytral markings approaching those of A. myttens, although the pale fasciae occupy a smaller proportion of the elytra, but much larger, prothorax longer and with more distinct punctures, and even the antennae black; from A. herus, which has very similar fasciae, it differs in being smaller, sbining, less flat, with much smaller and more sharply defined punctures. In general appearance it resembles some of the dark forms of A. hesperi on an enlarged scale, but the shape is more elongate, the head is smaller in proportion, more rounded at the hase, with smaller and more prominent eyes, etc. The elytral fasciae vary in size and intensity, the first ends in a straight line at the basal third with its sides almost touching the base and narrowed to the suture (which is not reached); as a result the black basal space is widely triangular; the second fascia is post-median, narrowly interrupted at the suture and not touching (sometimes rather distant from) the sides. The sexual differences of the abdomen and legs are slight.

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Deep shining black, two elytral fasciae, coxae and tarsi flavous, or reddishflavous. Elytra moderately clothed with short, ashen pubescence, rest of upper surface more soursely clothed.

Head subovate, quite semicircular beyond eyes, base not notched; with fairly dense and sharply defined punctures of moderate size, sparser along middle than elsewhere. Eyes moderately large, medio-lateral and very prominent. Antennae rather long and thin. Prothorax slightly longer than wide, sides strongly rounded in front, where the width is about equal to that of head across eyes, and is almost twice that of base, strongly constricted near base, the constriction traceable across disc; punctures much as on prothorax, but more crowded and less sharply defined in sub-basal depression, median line traceable as a narrowly impressed line towards base, as a slightly shining one towards apex. Elytra much wider than prothorax, shoulders moderately rounded, sides almost parallel to near apex. feebly transversely impressed near base; punctures sharply defined, rather dense, but not crowded near base, becoming smaller posteriorly. Intereoxal process of abdomen obtusely pointed. Length, 3—3.5 mm.

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# Anthicus Macellus, n.sp.

Of a rather pale red, head somewhat darker, abdomen deeply infuseated, elytra blackish, with four large, flavous spots, placed so as to form two interrupted fasciac, legs and palpi flavous. With very short, pale pubescence, more distinct on elytra than on the rest of the upper surface.

Head long, hind angles and base moderately rounded, the latter not notehed; with a feebly shining and narrow median line. Eyes small, medio-lateral and prominent. Antennae long and thin. Prothorax considerably longer than wide, sides strongly rounded near apex, and strongly incurved near base, base about two-thirds the width at the dilated sides, with two very feeble elevations; median line faintly impressed and short. Elytra much wider than prothorax, shoulders gently rounded, sides feebly dilated to beyond middle; punctures searcely visible. Legs rather long and thin. Length, 2 mm.

Hab.—Northern Queensland (Blackburn's collection).

An unusually narrow, depressed species, with head, prothorax and part of elytra opaque, owing to density of minute punctures, these being scarcely visible under a hand lens. The elytral spots are shaped much as on A. strictus, but the sub-basal ones are posthumeral instead of humeral; the two species, however, have little in common. The sub-basal spots are dilated outwardly and touch the sides but not the suture, and are scarcely triangular, the space between them and the base is of a dingier red than the head, beyond them the derm is of a rather shining black, the postmedian spots are large, of irregular shape, and are narrowly separated at the suture; near them on the sides the derm is pale, so that, from directly above, there appear to be four postmedian spots, appearing as a thrice interrupted fascia.

#### Anthicus Jucundus, n.sp.

Piceons-red or piceons-brown, elytra with two flavous fasciae, parts of femora and of tibiae deeply infuscated or blackish, rest of legs paler. Rather sparsely pubescent, and with dark, straggling hairs.

Head subovate, rather convex, hind angles and base strongly rounded, the latter not notched; with small but rather sharply defined punctures, sparse on basal half, more numerous and in parts dense, but not crowded in front. Eyes rather small, very prominent, and distant from base. Antennae long and thin. Prothorax longer than wide, sides dilated and strongly rounded near apex, strongly notched near base; with dense and sharply defined punctures of moderate size. Elytra elongate-elliptic, base very little wider than head across eyes, shoulders strongly rounded, sides moderately dilated to about the middle, a shallow transverse impression near base; with dense and fairly large punctures about base, about as large on black median portion as on prothorax, but much less errowded and becoming smaller but still sharply defined about apex. Intercexal process of abdomen acutely triangular. Legs moderately long. Length, 3—3.25

Hab.—Tasmania: St. Patrick's River (Aug. Simson), Bruni Island (A. M. Lea); Victoria (Blackburn's collection).

In general appearance approaches some forms of A. pallipes, but the prothorax is wider, with coarser punctures, front sides not conspicuously shining, and the elytra with shoulders more rounded off. From A. rarus and all its varieties it is distinguished by the larger prothorax with much denser punctures, and by the sub-basal depression on the elytra, the elytra are also smaller in proportion, with less prominent shoulders, and cover but small remnants of wings,

# Anthicus Macellus, n.sp.

Of a rather pale red, head somewhat darker, abdomen deeply infuseated, elytra blackish, with four large, flavous spots, placed so as to form two interrupted fasciac, legs and palpi flavous. With very short, pale pubescence, more distinct on elytra than on the rest of the upper surface.

Head long, hind angles and base moderately rounded, the latter not notehed; with a feebly shining and narrow median line. Eyes small, medio-lateral and prominent. Antennae long and thin. Prothorax considerably longer than wide, sides strongly rounded near apex, and strongly incurved near base, base about two-thirds the width at the dilated sides, with two very feeble elevations; median line faintly impressed and short. Elytra much wider than prothorax, shoulders gently rounded, sides feebly dilated to beyond middle; punctures searcely visible. Legs rather long and thin. Length, 2 mm.

Hab.—Northern Queensland (Blackburn's collection).

An unusually narrow, depressed species, with head, prothorax and part of elytra opaque, owing to density of minute punctures, these being scarcely visible under a hand lens. The elytral spots are shaped much as on A. strictus, but the sub-basal ones are posthumeral instead of humeral; the two species, however, have little in common. The sub-basal spots are dilated outwardly and touch the sides but not the suture, and are scarcely triangular, the space between them and the base is of a dingier red than the head, beyond them the derm is of a rather shining black, the postmedian spots are large, of irregular shape, and are narrowly separated at the suture; near them on the sides the derm is pale, so that, from directly above, there appear to be four postmedian spots, appearing as a thrice interrupted fascia.

#### Anthicus Jucundus, n.sp.

Piceons-red or piceons-brown, elytra with two flavous fasciae, parts of femora and of tibiae deeply infuscated or blackish, rest of legs paler. Rather sparsely pubescent, and with dark, straggling hairs.

Head subovate, rather convex, hind angles and base strongly rounded, the latter not notched; with small but rather sharply defined punctures, sparse on basal half, more numerous and in parts dense, but not crowded in front. Eyes rather small, very prominent, and distant from base. Antennae long and thin. Prothorax longer than wide, sides dilated and strongly rounded near apex, strongly notched near base; with dense and sharply defined punctures of moderate size. Elytra elongate-elliptic, base very little wider than head across eyes, shoulders strongly rounded, sides moderately dilated to about the middle, a shallow transverse impression near base; with dense and fairly large punctures about base, about as large on black median portion as on prothorax, but much less errowded and becoming smaller but still sharply defined about apex. Intercexal process of abdomen acutely triangular. Legs moderately long. Length, 3—3.25

Hab.—Tasmania: St. Patrick's River (Aug. Simson), Bruni Island (A. M. Lea); Victoria (Blackburn's collection).

In general appearance approaches some forms of A. pallipes, but the prothorax is wider, with coarser punctures, front sides not conspicuously shining, and the elytra with shoulders more rounded off. From A. rarus and all its varieties it is distinguished by the larger prothorax with much denser punctures, and by the sub-basal depression on the elytra, the elytra are also smaller in proportion, with less prominent shoulders, and cover but small remnants of wings, quite useless for flight. On one specimen the head and dark parts of elytra are almost black. Of the elytral fasciae the first occupies, but is not confined to, the sub-basal depression, being dilated on the sides (the dark basal space in front of it is triangular about the scutellum, and notched on each side before the shoulder); the second fascia is at the apical third, is not interrupted by the suture, and on two specimens is connected by a narrow sutural vitta with the apex; as a result on these the elytra appear to have a large dark spot on each side of the apex; these specimens also have the margins of the elytra narrowly pale throughout. The male differs from the female in having the abdomen smaller, its tip with a small triangular notch, the antennae and legs slightly longer, and the front tarsi somewhat dilated.

### Anthicus macrops, n.sp.

Dark chocolate-brown, head and abdomen almost black, prothorax obscurely reddish at base, clytra with a whitish sub-basal fascia; antennae flavous, the apical joints infuscated; legs slightly infuscated, the coxae and tarsi paler. Elytra with very short, sparse, depressed pubescence; rest of upper surface glabrous or almost so.

Head almost circular, hind angles and base evenly rounded, the latter not notched; punctures minute and sparse, searcely visible on basal half. Eyes large, searcely more distant from base than from antennae. Antennae moderately long, eighth to tenth joints slightly transverse. Prothorax strongly dilated near apex, strongly constricted near base; with a transverse, sub-basal depression, containing rather dense and sharply defined punctures, elsewhere very minutely punctate; a feeble elevation on each side of base. Elytra with shoulders slightly rounded, sides gently dilated to beyond the middle, where the width is fully twice that of the widest part of prothorax; punctures sparse and very minute. Intercoxal process of abdomen short and obtuse. Legs moderately long. Length, 2.25 mm.

Hab.—Queensland: Emerald (A. M. Lea).

A second specimen (from Dalby, Mrs. F. H. Hobler) is paler than the type, its head and abdomen are no darker than the dark parts of the elytra, and its prothorax is of a dingy red, becoming paler at the base. The intereoxal process is not triangular, although it appears so at first glance, as the metasternum in front of it is triangularly notched. The sub-basal fascia is rather narrow, terminates just before the basal third, and is slightly longer than the dark space in front of it. The species is structurally close to a bifusciate one identified by King as A. complus, but bas a single elytral fascia as on many other species, which although at first glance apparently all forms of one, are really structurally distinct, and their more salient features may be briefly noted as follows:

A. unifasciatus King. Eyes of moderate size and prominent, base of head evenly rounded.

A. constrictus Macl. Eyes smaller than on A. macrops, but still of fairly large size, antennae with fourth to tenth joints of even width, although decreasing in length to tenth (this may be a male feature only); on macrops the fourth is the thinnest of all the joints, the others feebly increasing in width to tenth (as on most species of the genus).

A. unicinctus Champ. Base of head suddenly dilated so that its widest part projects beyond the outer edges of the eyes (in Champion's figure this is not shown as prominently as on a cotype received from him); the eyes themselves rather small and prominent.

A. adelaidae Champ. I have not seen a specimen of this species; it is

quite useless for flight. On one specimen the head and dark parts of elytra are almost black. Of the elytral fasciae the first occupies, but is not confined to, the sub-basal depression, being dilated on the sides (the dark basal space in front of it is triangular about the scutellum, and notched on each side before the shoulder); the second fascia is at the apical third, is not interrupted by the suture, and on two specimens is connected by a narrow sutural vitta with the apex; as a result on these the elytra appear to have a large dark spot on each side of the apex; these specimens also have the margins of the elytra narrowly pale throughout. The male differs from the female in having the abdomen smaller, its tip with a small triangular notch, the antennae and legs slightly longer, and the front tarsi somewhat dilated.

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Dark chocolate-brown, head and abdomen almost black, prothorax obscurely reddish at base, clytra with a whitish sub-basal fascia; antennae flavous, the apical joints infuscated; legs slightly infuscated, the coxae and tarsi paler. Elytra with very short, sparse, depressed pubescence; rest of upper surface glabrous or almost so.

Head almost circular, hind angles and base evenly rounded, the latter not notched; punctures minute and sparse, searcely visible on basal half. Eyes large, searcely more distant from base than from antennae. Antennae moderately long, eighth to tenth joints slightly transverse. Prothorax strongly dilated near apex, strongly constricted near base; with a transverse, sub-basal depression, containing rather dense and sharply defined punctures, elsewhere very minutely punctate; a feeble elevation on each side of base. Elytra with shoulders slightly rounded, sides gently dilated to beyond the middle, where the width is fully twice that of the widest part of prothorax; punctures sparse and very minute. Intercoxal process of abdomen short and obtuse. Legs moderately long. Length, 2.25 mm.

Hab.—Queensland: Emerald (A. M. Lea).

A second specimen (from Dalby, Mrs. F. H. Hobler) is paler than the type, its head and abdomen are no darker than the dark parts of the elytra, and its prothorax is of a dingy red, becoming paler at the base. The intereoxal process is not triangular, although it appears so at first glance, as the metasternum in front of it is triangularly notched. The sub-basal fascia is rather narrow, terminates just before the basal third, and is slightly longer than the dark space in front of it. The species is structurally close to a bifusciate one identified by King as A. complus, but bas a single elytral fascia as on many other species, which although at first glance apparently all forms of one, are really structurally distinct, and their more salient features may be briefly noted as follows:

A. unifasciatus King. Eyes of moderate size and prominent, base of head evenly rounded.

A. constrictus Macl. Eyes smaller than on A. macrops, but still of fairly large size, antennae with fourth to tenth joints of even width, although decreasing in length to tenth (this may be a male feature only); on macrops the fourth is the thinnest of all the joints, the others feebly increasing in width to tenth (as on most species of the genus).

A. unicinctus Champ. Base of head suddenly dilated so that its widest part projects beyond the outer edges of the eyes (in Champion's figure this is not shown as prominently as on a cotype received from him); the eyes themselves rather small and prominent.

A. adelaidae Champ. I have not seen a specimen of this species; it is

described as having large eyes but "a very fine long erect hair" in each puncture of the upper surface; on both specimens of macrops the clothing is evidently in perfect condition, and is nowhere erect or long.

A. politulus Lea. Eyes small, prominent, and distant from base; more of

body parts darker (usually black) than in the other forms.

A. macrops, n.sp. Eyes large, occupying more than half the distance between antennae and base, and scarcely bulging beyond the even rotundity of the sides, base strongly and evenly rounded, without defined hind angles.

### ANTHICUS OSCULANS, n.sp.

Head and most of under surface black or blackish, prothorax of a more or less dull red, or reddish-brown, becoming paler about base; eltyra flavous, a sarrow basal space somewhat dilated about seutellum, a large median spot on each, connected with the side and the apical third chocolate-brown; antennae reddish, from one to five apical joints infuseated; legs flavous, parts of femora and sometimes of tibiae infuscated.

Head rather short, hind angles and base strongly rounded, the latter not notched; apical balf with small and fairly numerous punctures, becoming very faint posteriorly. Eyes of moderate size, medio-lateral and prominent. Antennae moderately long. Prothorax with sides strongly rounded and dilated in front, strongly notched near base; a transverse depression with dense and distinct punctures near base, elsewhere with sparse and minute ones; two feeble elevations at base. Elytra at base twice the width of prothorax, leaving part of abdomen exposed, shoulders gently rounded, sides feebly dilated to beyond the middle; punctures sparse and inconspicuous. Intercoxal process of abdomen narrow and obtusely pointed. Legs rather thin. Length; 2–2.5.5 mm.

Hab .- South Australia: Quorn (A. H. Elston), Murray River (H. S.

Cope).

Appears to connect the groups about 4. (Micrauthicus) pulcher and 4. myrteus; from the latter it is distinguished by the slightly flatter form, more parallel-sided elytra with the median fascia represented by a triangular spot on each side, often hardly more than slight infuscations and with the tip of each always distant from the suture; from pulcher it is distinguished by the larger head, with smaller eyes, the elytra with different markings, slightly larger, and covering ample wings, although leaving part of the abdomen exposed. On the darker specimens the pale parts somewhat resemble a rough X and the dark markings on each elytron are narrowly connected along the side; on the paler ones the base is scarrely infuscated, and the medio-lateral spot on each is taint or altogether absent, so that the only distinctively dark part of the elytra is the apical third. Of nine specimens under examination seven have an exserted original of the positor, and I can find no distinctively masculine features on the other two.

#### Anthicus melanostictus, n.sp.

Reddish-castaneous, legs and antennae paler, elytra with a fascia (sometimes divided into two large spots) and the apex black. Moderately clothed with suberect pubescence, slightly longer on elytra than on head and prothorax.

Head subovate, hind angles moderately rounded, base very feebly incurved at middle; with rather dense and sharply defined punctures, but leaving an almost impunctate median line. Eyes rather small, very prominent, much nearer antennae than base. Antennae moderately long, eighth to tenth joints transverse. Prothorax slightly longer than wide, sides strongly rounded and widest near apex, thence almost evenly decreasing in width to base; punctures dense,

described as having large eyes but "a very fine long erect hair" in each puncture of the upper surface; on both specimens of macrops the clothing is evidently in perfect condition, and is nowhere erect or long.

A. politulus Lea. Eyes small, prominent, and distant from base; more of

body parts darker (usually black) than in the other forms.

A. macrops, n.sp. Eyes large, occupying more than half the distance between antennae and base, and scarcely bulging beyond the even rotundity of the sides, base strongly and evenly rounded, without defined hind angles.

### ANTHICUS OSCULANS, n.sp.

Head and most of under surface black or blackish, prothorax of a more or less dull red, or reddish-brown, becoming paler about base; eltyra flavous, a sarrow basal space somewhat dilated about seutellum, a large median spot on each, connected with the side and the apical third chocolate-brown; antennae reddish, from one to five apical joints infuseated; legs flavous, parts of femora and sometimes of tibiae infuscated.

Head rather short, hind angles and base strongly rounded, the latter not notched; apical balf with small and fairly numerous punctures, becoming very faint posteriorly. Eyes of moderate size, medio-lateral and prominent. Antennae moderately long. Prothorax with sides strongly rounded and dilated in front, strongly notched near base; a transverse depression with dense and distinct punctures near base, elsewhere with sparse and minute ones; two feeble elevations at base. Elytra at base twice the width of prothorax, leaving part of abdomen exposed, shoulders gently rounded, sides feebly dilated to beyond the middle; punctures sparse and inconspicuous. Intercoxal process of abdomen narrow and obtusely pointed. Legs rather thin. Length; 2–2.5.5 mm.

Hab .- South Australia: Quorn (A. H. Elston), Murray River (H. S.

Cope).

Appears to connect the groups about 4. (Micrauthicus) pulcher and 4. myrteus; from the latter it is distinguished by the slightly flatter form, more parallel-sided elytra with the median fascia represented by a triangular spot on each side, often hardly more than slight infuscations and with the tip of each always distant from the suture; from pulcher it is distinguished by the larger head, with smaller eyes, the elytra with different markings, slightly larger, and covering ample wings, although leaving part of the abdomen exposed. On the darker specimens the pale parts somewhat resemble a rough X and the dark markings on each elytron are narrowly connected along the side; on the paler ones the base is scarrely infuscated, and the medio-lateral spot on each is taint or altogether absent, so that the only distinctively dark part of the elytra is the apical third. Of nine specimens under examination seven have an exserted original of the positor, and I can find no distinctively masculine features on the other two.

#### Anthicus melanostictus, n.sp.

Reddish-castaneous, legs and antennae paler, elytra with a fascia (sometimes divided into two large spots) and the apex black. Moderately clothed with suberect pubescence, slightly longer on elytra than on head and prothorax.

Head subovate, hind angles moderately rounded, base very feebly incurved at middle; with rather dense and sharply defined punctures, but leaving an almost impunctate median line. Eyes rather small, very prominent, much nearer antennae than base. Antennae moderately long, eighth to tenth joints transverse. Prothorax slightly longer than wide, sides strongly rounded and widest near apex, thence almost evenly decreasing in width to base; punctures dense,

sharply defined and slightly larger than on head. Elytra much wider than prothorax, shoulders slightly rounded, sides almost parallel to near apex; punctures on basal half larger than on prothorax, becoming smaller and sparser posteriorly but distinct to apex. Intercoxal process of abdomen short and subacute. Legs moderately long. Length, 2.5—3 mm.

Hab.—Queensland: Townsville (F. P. Dodd), Cairns, Emerald (A. M. Lea);
Northern Territory: Darwin (W. K. Hunt); North Western Australia: Derby

(Dr. A. M. Morgan), Fortescue River (W. D. Dodd).

At first glance resembles some of the multitudinous forms of A. hesperi. but the prothorax is of different shape, the head is smaller and the punctures are decidedly coarser; the markings are almost as on some of the larger forms of A. kreusleri, but all the punctures are decidedly coarser; A. xerophilus is considerably narrower with much smaller punctures, and the notch at the base of its head is always distinct; on the present species the basal incurvature is very faint, and could hardly be regarded as a notch; in general appearance it is somewhat like A. gawleri, on a greatly reduced scale. The head varies from no darker than the prothorax to almost black, the abdomen is often deeply infuscated. The black elytral fascia sometimes occupies the whole of the median third, except for a very narrow interruption at the suture, is connected along the sides with the black apical fourth or fifth, and also by an infuscation along the suture, so that a spot (conspicuously flavous) is enclosed on each elytron; but on an occasional specimen the pale sutural space is increased, so that the fascia, from above, appears as two large, disconnected spots. The punctures on the metasternum are slightly coarser than those on the prothorax. The male differs from the female in having the hind tibiae slightly more curved, all the tarsi slightly more dilated, and the apical segment of abdomen less evenly convex.

#### Anthicus mimetes, n.sp.

Pale reddish-eastaneous, head and prothorax opaque; elytra flavous, base, apex, and a median fascia blackish or deeply infuscated; legs flavous. With

very short, depressed, pale pubescence.

Head short, hind angles moderately rounded, base not notehed; with minute crowded punetures, but leaving a narrow, shining median line. Eyes rather large, prominent, not much more distant from base than from antennae. Antennae thin, but not very long. Prothorax slightly longer than wide, sides in front strongly rounded, and much wider than base, strongly notched near base, with a feeble depression connecting the notches, behind it two very feeble elevations: punetures much as on head, but becoming more noticeable about base. Elytra much wider than prothorax, shoulders slightly rounded, sides very feebly dilated to about the middle; with dense but inconspicuous punetures. Intercoxal process of abdomen narrow and gently rounded. Legs rather thin. Length, 2—2.25 mm.

Hab.—South Australia: Barossa. Quorn (A. H. Elston), Lucindale (F. Secker), Mount Lofty; New South Wales: Wagga Wagga (R. Helms), Forest Reefs (A. M. Lea).

A depressed species readily distinguished from the many similarly coloured ones by the opaque head and prothorax. The elytral markings vary in extent and intensity, and on some specimens might be regarded as consisting of three fasciae; the median fascia is always conspicuous, but on some specimens is narrowed towards and interrupted at the suture, it occupies about one-fifth or one-sixth of the length of the elytra, the apical mark is semicircular, the base on

sharply defined and slightly larger than on head. Elytra much wider than prothorax, shoulders slightly rounded, sides almost parallel to near apex; punctures on basal half larger than on prothorax, becoming smaller and sparser posteriorly but distinct to apex. Intercoxal process of abdomen short and subacute. Legs moderately long. Length, 2.5—3 mm.

Hab.—Queensland: Townsville (F. P. Dodd), Cairns, Emerald (A. M. Lea);
Northern Territory: Darwin (W. K. Hunt); North Western Australia: Derby

(Dr. A. M. Morgan), Fortescue River (W. D. Dodd).

At first glance resembles some of the multitudinous forms of A. hesperi. but the prothorax is of different shape, the head is smaller and the punctures are decidedly coarser; the markings are almost as on some of the larger forms of A. kreusleri, but all the punctures are decidedly coarser; A. xerophilus is considerably narrower with much smaller punctures, and the notch at the base of its head is always distinct; on the present species the basal incurvature is very faint, and could hardly be regarded as a notch; in general appearance it is somewhat like A. gawleri, on a greatly reduced scale. The head varies from no darker than the prothorax to almost black, the abdomen is often deeply infuscated. The black elytral fascia sometimes occupies the whole of the median third, except for a very narrow interruption at the suture, is connected along the sides with the black apical fourth or fifth, and also by an infuscation along the suture, so that a spot (conspicuously flavous) is enclosed on each elytron; but on an occasional specimen the pale sutural space is increased, so that the fascia, from above, appears as two large, disconnected spots. The punctures on the metasternum are slightly coarser than those on the prothorax. The male differs from the female in having the hind tibiae slightly more curved, all the tarsi slightly more dilated, and the apical segment of abdomen less evenly convex.

#### Anthicus mimetes, n.sp.

Pale reddish-eastaneous, head and prothorax opaque; elytra flavous, base, apex, and a median fascia blackish or deeply infuscated; legs flavous. With

very short, depressed, pale pubescence.

Head short, hind angles moderately rounded, base not notehed; with minute crowded punetures, but leaving a narrow, shining median line. Eyes rather large, prominent, not much more distant from base than from antennae. Antennae thin, but not very long. Prothorax slightly longer than wide, sides in front strongly rounded, and much wider than base, strongly notched near base, with a feeble depression connecting the notches, behind it two very feeble elevations: punetures much as on head, but becoming more noticeable about base. Elytra much wider than prothorax, shoulders slightly rounded, sides very feebly dilated to about the middle; with dense but inconspicuous punetures. Intercoxal process of abdomen narrow and gently rounded. Legs rather thin. Length, 2—2.25 mm.

Hab.—South Australia: Barossa. Quorn (A. H. Elston), Lucindale (F. Secker), Mount Lofty; New South Wales: Wagga Wagga (R. Helms), Forest Reefs (A. M. Lea).

A depressed species readily distinguished from the many similarly coloured ones by the opaque head and prothorax. The elytral markings vary in extent and intensity, and on some specimens might be regarded as consisting of three fasciae; the median fascia is always conspicuous, but on some specimens is narrowed towards and interrupted at the suture, it occupies about one-fifth or one-sixth of the length of the elytra, the apical mark is semicircular, the base on

some specimens is conspicuously dark, on others it is but slightly infuscated about the scutellum; the sides of the abdomen are sometimes infuscated. The clytral punctures are not sharply defined, even at the base. The sexual differences of the legs and abdomen are but slight. Specimens with the basal marking faint rather strongly resemble A. xerophilus, but on that species the head and prothorax are shining.

# ANTHICUS GLOBICEPS, n.sp.

Pale reddish-eastaneous, elytra flavous with black or infuscated markings, and legs flavous, apical joints of the former more or less infuscated. Upper surface with depressed, whitish pubescence, more distinct on elytra than elsewhere.

Head rather short, hind angles and base continuously rounded, the latter not notched; with dense and small, but in some lights rather sharply defined punctures. Eyes comparatively large, medio-lateral and very prominent. Antennae rather short, three or four of the subapical joints transverse. Prothorax slightly longer than wide, front sides strongly dilated and almost twice the width of base, strongly notched near base; with dense and small punctures, becoming larger in a feeble sub-basal depression. Elytra elongate, much wider than prothorax, shoulders slightly rounded, sides almost parallel to near apex; punctures fairly dense and small, becoming scarcely visible posteriorly. Intercoxal process of abdomen short and gently rounded. Legs rather thin. Length, 2—2.25 mm.

Hab.—Queensland: Townsville (F. P. Dodd), Cairns District (E. Allen and A. M. Lea), Stewart River (W. D. Dodd).

At first glance apparently belonging to A. mimetes but the head and prothorax are not opaque, the hind angles of the former are completely rounded off, and the punctures are rather more sharply defined; the shining prothorax also at once distinguishes the species from A. pallines, some forms of which have very similar elytral markings. Structurally it is close to A. myrteus and the elytral markings are in almost exactly similar positions, but is much brighter, the head slightly smaller and with larger eyes. From A. geminatus it differs in the squarer shoulders, shorter head and considerably larger eyes. A. monilis is a more convex species, with stronger punctures, head larger and eyes much smaller. A. nitidissimus has a decidedly narrower prothorax and longer head, with smaller eyes. The elytra have a black or blackish median fascia and an apical patch much as on mimetes, and usually a dark patch on each side of the base, but occasionally the latter are scarcely traceable; those without the basal infuscations rather closely resemble A. xerophilus, but the head is not notched at the base. One specimen has the median fascia and apical patch larger than usual, and connected along the sides and suture, so that a fairly large, pale, transverse spot is enclosed on each elytron, at about the apical third; on another the median fascia is broken up into two transverse, disconnected spots, and the apical spot appears as two, owing to the suture and tips being narrowly pale. The head is sometimes moderately infuscated; the four apical segments of abdomen are usually infuscated or black, but occasionally are no darker than the metasternum. On one specimen, from Cairns, the elytral markings are all reduced to feeble infuscations, although the median fascia is continuous.

Six specimens (from Darwin, W. K. Hunt) are smaller and paler than all (although the four apical segments of abdomen are dark) with the elytra less parallel-sided, the median fascia reduced to two obtusely-pointed, transverse

some specimens is conspicuously dark, on others it is but slightly infuscated about the scutellum; the sides of the abdomen are sometimes infuscated. The clytral punctures are not sharply defined, even at the base. The sexual differences of the legs and abdomen are but slight. Specimens with the basal marking faint rather strongly resemble A. xerophilus, but on that species the head and prothorax are shining.

# ANTHICUS GLOBICEPS, n.sp.

Pale reddish-eastaneous, elytra flavous with black or infuscated markings, and legs flavous, apical joints of the former more or less infuscated. Upper surface with depressed, whitish pubescence, more distinct on elytra than elsewhere.

Head rather short, hind angles and base continuously rounded, the latter not notched; with dense and small, but in some lights rather sharply defined punctures. Eyes comparatively large, medio-lateral and very prominent. Antennae rather short, three or four of the subapical joints transverse. Prothorax slightly longer than wide, front sides strongly dilated and almost twice the width of base, strongly notched near base; with dense and small punctures, becoming larger in a feeble sub-basal depression. Elytra elongate, much wider than prothorax, shoulders slightly rounded, sides almost parallel to near apex; punctures fairly dense and small, becoming scarcely visible posteriorly. Intercoxal process of abdomen short and gently rounded. Legs rather thin. Length, 2—2.25 mm.

Hab.—Queensland: Townsville (F. P. Dodd), Cairns District (E. Allen and A. M. Lea), Stewart River (W. D. Dodd).

At first glance apparently belonging to A. mimetes but the head and prothorax are not opaque, the hind angles of the former are completely rounded off, and the punctures are rather more sharply defined; the shining prothorax also at once distinguishes the species from A. pallines, some forms of which have very similar elytral markings. Structurally it is close to A. myrteus and the elytral markings are in almost exactly similar positions, but is much brighter, the head slightly smaller and with larger eyes. From A. geminatus it differs in the squarer shoulders, shorter head and considerably larger eyes. A. monilis is a more convex species, with stronger punctures, head larger and eyes much smaller. A. nitidissimus has a decidedly narrower prothorax and longer head, with smaller eyes. The elytra have a black or blackish median fascia and an apical patch much as on mimetes, and usually a dark patch on each side of the base, but occasionally the latter are scarcely traceable; those without the basal infuscations rather closely resemble A. xerophilus, but the head is not notched at the base. One specimen has the median fascia and apical patch larger than usual, and connected along the sides and suture, so that a fairly large, pale, transverse spot is enclosed on each elytron, at about the apical third; on another the median fascia is broken up into two transverse, disconnected spots, and the apical spot appears as two, owing to the suture and tips being narrowly pale. The head is sometimes moderately infuscated; the four apical segments of abdomen are usually infuscated or black, but occasionally are no darker than the metasternum. On one specimen, from Cairns, the elytral markings are all reduced to feeble infuscations, although the median fascia is continuous.

Six specimens (from Darwin, W. K. Hunt) are smaller and paler than all (although the four apical segments of abdomen are dark) with the elytra less parallel-sided, the median fascia reduced to two obtusely-pointed, transverse

spots, almost touching the sides, but some distance from the suture, and with the infuscation about the scutellum very faint.

### ANTHICUS FUSCOTIBIALIS, n.sp.

Pale reddish-castaneous; elytra black or blackish with a complete sub-basal fascia, and an interrupted postmedian one, or two transverse spots, flavous; legs pale castaneous or flavous, tibiae infuscated; antennae with apieal half or more infuscated; abdomen blackish, except for part of the basal segment. Elytra with rather sparse, depressed, pale pubescence, sparser on rest of upper surface; with a few short, scattered hairs.

Head rather short, sides behind eyes parallel for a short distance, base moderately rounded and not notched; with rather sharply defined and numerous but small punctures in front, sparser and more irregular elsewhere. Eyes rather small, medio-lateral and very prominent. Antennae moderately long, three or four joints transverse. Prothorax distinctly longer than wide, sides in front strongly dilated and almost twice the width of base, strongly notched near base, a distinct depression connecting the two notches across disc, base with two obtuse elevations; punctures sparse and small, more distinct about sub-basal depression than elsewhere. Elytra with shoulders slightly rounded, sides moderately dilated to beyond the middle, where the width is fully twice that of the widest part of prothorax; with sharply defined but not very large or crowded punctures near base, becoming much smaller posteriorly. Intercoxal process of abdomen slightly wider than usual, the tip semicircular. Legs moderately long. Length, 2-2.25 mm.

Hab.—Western Australia: Beverley (E. F. du Boulay), Kalgoorlie (W. du Boulay), Geraldton (A. M. Lea); South Australia: Port Lincoln (Rev. T. Blackburn).

A rather flat species. The pale sub-basal fascia is rather wide, much as on A unifasciatus and allied species, and is connected along the suture with the base; the base itself is usually not as dark as the other dark parts of the elytra and is sometimes but moderately infuscated (such specimens seem to approach some forms of A, zerophilus, from which they differ in the head not notched at base); the postmedian spots are somewhat obliquely placed and narrowed towards the suture, which they never appear quite to reach, although on some specimens the part separating them from the suture is rather slightly infuscated. Of the thirteen specimens under examination two have the head slightly infuscated, and of these one has the prothorax infuscated in front; all have the tibiae conspienously darker than the femora and tarsi. In the male the tip of the abdomen is slightly notched, and the legs are slightly longer than in the female.

#### ANTHICUS ACUTIBASIS, n.sp.

Chocolate-brown, some parts almost black; elytra with a sub-basal fascia and two postmedian spots flavous, under surface reddish-eastaneous or flavous, abdomen (except basal segment) blackish, antennae and legs flavous, knees and sometimes parts of femora infuseated. With sparse pubescence and a few straggling hairs.

Head rather long, hind angles and base strongly rounded, with rather dense and sharply defined punctures; with a shining, impunctate and almost continuous median line that, posteriorly, appears as a pointed ridge. Eyes of moderate size, much nearer antennae than base and very prominent. Antennae moderately spots, almost touching the sides, but some distance from the suture, and with the infuscation about the scutellum very faint.

### ANTHICUS FUSCOTIBIALIS, n.sp.

Pale reddish-castaneous; elytra black or blackish with a complete sub-basal fascia, and an interrupted postmedian one, or two transverse spots, flavous; legs pale castaneous or flavous, tibiae infuscated; antennae with apieal half or more infuscated; abdomen blackish, except for part of the basal segment. Elytra with rather sparse, depressed, pale pubescence, sparser on rest of upper surface; with a few short, scattered hairs.

Head rather short, sides behind eyes parallel for a short distance, base moderately rounded and not notched; with rather sharply defined and numerous but small punctures in front, sparser and more irregular elsewhere. Eyes rather small, medio-lateral and very prominent. Antennae moderately long, three or four joints transverse. Prothorax distinctly longer than wide, sides in front strongly dilated and almost twice the width of base, strongly notched near base, a distinct depression connecting the two notches across disc, base with two obtuse elevations; punctures sparse and small, more distinct about sub-basal depression than elsewhere. Elytra with shoulders slightly rounded, sides moderately dilated to beyond the middle, where the width is fully twice that of the widest part of prothorax; with sharply defined but not very large or crowded punctures near base, becoming much smaller posteriorly. Intercoxal process of abdomen slightly wider than usual, the tip semicircular. Legs moderately long. Length, 2-2.25 mm.

Hab.—Western Australia: Beverley (E. F. du Boulay), Kalgoorlie (W. du Boulay), Geraldton (A. M. Lea); South Australia: Port Lincoln (Rev. T. Blackburn).

A rather flat species. The pale sub-basal fascia is rather wide, much as on A unifasciatus and allied species, and is connected along the suture with the base; the base itself is usually not as dark as the other dark parts of the elytra and is sometimes but moderately infuscated (such specimens seem to approach some forms of A, zerophilus, from which they differ in the head not notched at base); the postmedian spots are somewhat obliquely placed and narrowed towards the suture, which they never appear quite to reach, although on some specimens the part separating them from the suture is rather slightly infuscated. Of the thirteen specimens under examination two have the head slightly infuscated, and of these one has the prothorax infuscated in front; all have the tibiae conspienously darker than the femora and tarsi. In the male the tip of the abdomen is slightly notched, and the legs are slightly longer than in the female.

#### ANTHICUS ACUTIBASIS, n.sp.

Chocolate-brown, some parts almost black; elytra with a sub-basal fascia and two postmedian spots flavous, under surface reddish-eastaneous or flavous, abdomen (except basal segment) blackish, antennae and legs flavous, knees and sometimes parts of femora infuseated. With sparse pubescence and a few straggling hairs.

Head rather long, hind angles and base strongly rounded, with rather dense and sharply defined punctures; with a shining, impunctate and almost continuous median line that, posteriorly, appears as a pointed ridge. Eyes of moderate size, much nearer antennae than base and very prominent. Antennae moderately long, ninth and tenth joints conspicuously transverse. Elytra with sparse and minute punctures. Length,  $2.5-2.75\,$  mm.

Hab.—Northern Queensland (Blackburn's collection).

At first glance appears to be a large variety of the preceding species, but the consistently larger size, longer head with basal projection and stronger punctures, thicker and entirely pale antennae, finer elytral punctures and tibiae (except at the knees) no darker than the adjacent parts, are sufficiently distinctive. The prothorax (except at apex), elytra (except for the punctures), addomen and legs, are sculptured as described on that species. On three specimens the prothorax is of a rather bright castaneous with the head but little darker; on two others they are as dark as the dark parts of the elytra; on three of them the front femora are darker than the others, and have an obscurely pale longitudinal vitta. The pale elytral markings are placed as on the preceding species, but the sub-basal fascia is interrupted near the suture by a subtriangular extension of the basal infrascation; the transverse postmedian spots are more widely separation from the suture, and on one of them are rather narrow and less sharply defined.

Two specimens from the Northern Territory (Melville Island, W. D. Dodd) have the general colours dingier, but with the sub-basal fascia (which is not interrupted at the suture) and transverse postmedian spots white; on one of them the head has comparatively dense and coarse punctures, with the median line not traceable, except at the base, where it appears as a rather narrow ridge, causing the head to appear pointed there; on the other specimen the head is smaller,

with smaller punctures but the ridge quite as distinct.

On all the specimens (although more noticeably on some than on others) the base of the head is seen to be quite acute, owing to the ridge being abruptly terminated, although not overhanging; from directly above, however, the base appears strongly rounded off. They all have a medio-apical ridge on the prothorax although this is indistinct with the head in position.

# Anthicus foveifer, n.sp.

d. Black or blackish-brown, prothorax of a dingy red, base paler, elytra with four flavous spots or two interrupted fasciae, antennae and legs flavous, three or four apical joints of the former, and tibiae and most of femora of the latter, influscated. Upper surface with depressed pubescence and a few short hairs.

Head rather short, hind angles and base strongly rounded, the latter not notehed; with sparse and small, but fairly sharply defined punctures, becoming denser in front. Eyes comparatively large, medio-lateral and prominent. Antennae moderately long. Prothorax longer than wide, front moderately convex, sides in front strongly rounded and almost twice the width of base, strongly notehed at basal third; transversely depressed and with distinct punctures near base, smaller and sparser ones elsewhere; two feeble elevations at base. Elytra with shoulders slightly rounded, sides moderately dilated to beyond the middle, where the width is more than twice the widest part of prothorax; punctures feebly defined. Abdomen with intercoxal process wider than usual, and gently rounded, apical segment with a rather deep fovea extending from base almost to apex, and occupying rather less than the median third. Legs rather long and thin. Length, 2.25 mm.

Hab.—Western Australia: Beverley (F. H. du Boulay).

In general appearance the type resembles a very large specimen of A. strictus, but the head is much shorter, its base is more strongly rounded off and the eyes

long, ninth and tenth joints conspicuously transverse. Elytra with sparse and minute punctures. Length,  $2.5-2.75\,$  mm.

Hab.—Northern Queensland (Blackburn's collection).

At first glance appears to be a large variety of the preceding species, but the consistently larger size, longer head with basal projection and stronger punctures, thicker and entirely pale antennae, finer elytral punctures and tibiae (except at the knees) no darker than the adjacent parts, are sufficiently distinctive. The prothorax (except at apex), elytra (except for the punctures), addomen and legs, are sculptured as described on that species. On three specimens the prothorax is of a rather bright castaneous with the head but little darker; on two others they are as dark as the dark parts of the elytra; on three of them the front femora are darker than the others, and have an obscurely pale longitudinal vitta. The pale elytral markings are placed as on the preceding species, but the sub-basal fascia is interrupted near the suture by a subtriangular extension of the basal infrascation; the transverse postmedian spots are more widely separation from the suture, and on one of them are rather narrow and less sharply defined.

Two specimens from the Northern Territory (Melville Island, W. D. Dodd) have the general colours dingier, but with the sub-basal fascia (which is not interrupted at the suture) and transverse postmedian spots white; on one of them the head has comparatively dense and coarse punctures, with the median line not traceable, except at the base, where it appears as a rather narrow ridge, causing the head to appear pointed there; on the other specimen the head is smaller,

with smaller punctures but the ridge quite as distinct.

On all the specimens (although more noticeably on some than on others) the base of the head is seen to be quite acute, owing to the ridge being abruptly terminated, although not overhanging; from directly above, however, the base appears strongly rounded off. They all have a medio-apical ridge on the prothorax although this is indistinct with the head in position.

# Anthicus foveifer, n.sp.

d. Black or blackish-brown, prothorax of a dingy red, base paler, elytra with four flavous spots or two interrupted fasciae, antennae and legs flavous, three or four apical joints of the former, and tibiae and most of femora of the latter, influscated. Upper surface with depressed pubescence and a few short hairs.

Head rather short, hind angles and base strongly rounded, the latter not notehed; with sparse and small, but fairly sharply defined punctures, becoming denser in front. Eyes comparatively large, medio-lateral and prominent. Antennae moderately long. Prothorax longer than wide, front moderately convex, sides in front strongly rounded and almost twice the width of base, strongly notehed at basal third; transversely depressed and with distinct punctures near base, smaller and sparser ones elsewhere; two feeble elevations at base. Elytra with shoulders slightly rounded, sides moderately dilated to beyond the middle, where the width is more than twice the widest part of prothorax; punctures feebly defined. Abdomen with intercoxal process wider than usual, and gently rounded, apical segment with a rather deep fovea extending from base almost to apex, and occupying rather less than the median third. Legs rather long and thin. Length, 2.25 mm.

Hab.—Western Australia: Beverley (F. H. du Boulay).

In general appearance the type resembles a very large specimen of A. strictus, but the head is much shorter, its base is more strongly rounded off and the eyes

are fully twice as large. From A. fuscotibialis it differs also in the much larger eyes, and by the sub-basal fascia being composed of two slightly oblique or curved spots, narrowing towards and almost meeting at the suture, instead of a straight and continuous fascia. In some respects it approaches A. myrteus, but the large abdominal fovea of the male is at once distinctive. The sub-basal fascia is interrupted before the suture by a subtriangular extension of the dark base, the transverse spots or interrupted fascia at the apical third are quite distinct, but not sharply limited; the metasternum and abdomen, except where they meet, are quite as black as the head.

### Anthicus parvulus, n.sp.

Reddish-castaneous, legs somewhat paler, elytra with a black submedian fascia, their base and apex, head, apical half of antennae and most of abdomen infuscated. Elytra with depressed pale pubescence, rest of upper surface very sparsely elothed.

Head (excluding neck) about as long as its greatest width, hind angles and base strongly rounded; the latter slightly notched, with rather sparse and small, but sharply defined punctures, sparser along middle than elsewhere. Eyes small, medio-lateral and very prominent. Antennae moderately long, three or four joints transverse. Prothorax slightly longer than wide, sides strongly rounded in front, strongly narrowed towards and notched near base; punctures small. Elytra not quite concealing abdomen, shoulders slightly rounded, sides slightly dilated to beyond the middle, where the width is fully twice that of the wides part of prothorax; with rather dense and moderately large, sharply defined punctures, becoming minute beyond the fascia. Metasternum with dense and sharply defined punctures. Intereoxal process of abdomen obtusely pointed. Legs rather thin. Length, 2 mm.

Hab.—Victoria: Beaconsfield, in December; Queensland: Goodna, in October (F. E. Wilson).

About the size of, and structurally rather close to A. monilis, but with sparser punctures, although on the basal half of the elytra they are quite as large, the head and prothorax are slightly smaller, the antennae are not entirely pale (on some of them the tip of the apical joint is pale) and the elytral markings are reduced to a narrower submedian fascia, with the basal and apical infuscations rather faint, although on two specimens these are almost as dark as the fascia; this is slightly beyond the middle, on one specimen it is quite even, but on most of them it is narrowed towards the suture and on two is unterrupted there; at its widest it is about one-seventh the length of the elytra. One specimen has the abdomen entirely pale. The notch at the base of the bead is small and invisible from most directions, but is fairly distinct when viewed obliquely from behind. The male differs from the female in having the tip of the abdomen slightly notched, the legs slightly longer, with the front tarsi wider.

#### ANTHICUS ABUNDANS, n.sp.

3. Colours and markings variable. Moderately clothed with subdepressed pubescence, and with scattered erect setae or short hairs.

Head short and wide, hind angles slightly rounded, base almost straight; punctures of moderate size and sharply defined but sparse, more numerous near eyes than elsewhere. Eyes large and prominent, scarcely more distant from base than from antennae. Antennae moderately long, none of the joints distinctly transverse. Prothorax distinctly wider than long, sides widest and strongly

are fully twice as large. From A. fuscotibialis it differs also in the much larger eyes, and by the sub-basal fascia being composed of two slightly oblique or curved spots, narrowing towards and almost meeting at the suture, instead of a straight and continuous fascia. In some respects it approaches A. myrteus, but the large abdominal fovea of the male is at once distinctive. The sub-basal fascia is interrupted before the suture by a subtriangular extension of the dark base, the transverse spots or interrupted fascia at the apical third are quite distinct, but not sharply limited; the metasternum and abdomen, except where they meet, are quite as black as the head.

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Reddish-castaneous, legs somewhat paler, elytra with a black submedian fascia, their base and apex, head, apical half of antennae and most of abdomen infuscated. Elytra with depressed pale pubescence, rest of upper surface very sparsely elothed.

Head (excluding neck) about as long as its greatest width, hind angles and base strongly rounded; the latter slightly notched, with rather sparse and small, but sharply defined punctures, sparser along middle than elsewhere. Eyes small, medio-lateral and very prominent. Antennae moderately long, three or four joints transverse. Prothorax slightly longer than wide, sides strongly rounded in front, strongly narrowed towards and notched near base; punctures small. Elytra not quite concealing abdomen, shoulders slightly rounded, sides slightly dilated to beyond the middle, where the width is fully twice that of the wides part of prothorax; with rather dense and moderately large, sharply defined punctures, becoming minute beyond the fascia. Metasternum with dense and sharply defined punctures. Intereoxal process of abdomen obtusely pointed. Legs rather thin. Length, 2 mm.

Hab.—Victoria: Beaconsfield, in December; Queensland: Goodna, in October (F. E. Wilson).

About the size of, and structurally rather close to A. monilis, but with sparser punctures, although on the basal half of the elytra they are quite as large, the head and prothorax are slightly smaller, the antennae are not entirely pale (on some of them the tip of the apical joint is pale) and the elytral markings are reduced to a narrower submedian fascia, with the basal and apical infuscations rather faint, although on two specimens these are almost as dark as the fascia; this is slightly beyond the middle, on one specimen it is quite even, but on most of them it is narrowed towards the suture and on two is unterrupted there; at its widest it is about one-seventh the length of the elytra. One specimen has the abdomen entirely pale. The notch at the base of the bead is small and invisible from most directions, but is fairly distinct when viewed obliquely from behind. The male differs from the female in having the tip of the abdomen slightly notched, the legs slightly longer, with the front tarsi wider.

#### ANTHICUS ABUNDANS, n.sp.

3. Colours and markings variable. Moderately clothed with subdepressed pubescence, and with scattered erect setae or short hairs.

Head short and wide, hind angles slightly rounded, base almost straight; punctures of moderate size and sharply defined but sparse, more numerous near eyes than elsewhere. Eyes large and prominent, scarcely more distant from base than from antennae. Antennae moderately long, none of the joints distinctly transverse. Prothorax distinctly wider than long, sides widest and strongly

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rounded near apex, where the width is equal to that of head across eyes, strongly narrowed to and notched near base; with sharply defined and fairly numerous punctures, but nowhere crowded. Elytra rather elongate, shoulders gently rounded, the width across them not much more than widest part of prothorax, sides gently dilated to middle; with numerous, but not crowded, sharply defined punctures of moderate size, becoming smaller posteriorly, but distinct even at apex. Ahdomen with intercoxal process narrow and acutely triangular; apical segment with a fairly deep medio-apical incurvature. Hind tibiac rather long, apical two-thirds slightly incurved on one side. Length, 2.5—3 mm.

Q. Differs in having the head smaller, antennae shorter and thinner, abdomen more evenly convex and larger, the tip not at all incurved, legs shorter, hind tibiae straight and front tarsi narrower.

Hab.—Queensland: Cairns District (Blackburn's collection and A. M. Lea),

Townsville (F. E. Wilson from G. F. Hill), Bundaberg.

As with most members of the A. brevicollis group the markings are very variable, the elytra are rather long for a member of that group, but the head. with its large eyes, and the short prothorax are normal. From most directions the head appears to be quite straight or gently rounded at the base, but from some a very feeble median incurvature (it could not be regarded as a notch) may be traced. The darker males have the head (muzzle obscurely reddish), prothorax (base obscurely reddish), and elytra (four flavous spots excepted) varying from dark reddish-brown to black; the abdomen (partly or entirely), parts of the legs, and from five to seven apical joints of antennae more or less deeply infuscated; such dark males are more abundant than the other forms, and have two flavous triangular humeral spots distinctly separated from the suture by a triangular extension of the dark basal portion, and two obliquely transverse spots at the apical third, not quite meeting at the suture; on other specimens the pale spots gradually enlarge till the two humeral ones become a wide sub-basal fascia, scarcely or not at all interrupted at the suture, and the postmedian spots are dilated (but still separated at the suture) so that there is left a fairly wide black median fascia; on other specimens the pale portions are still more enlarged, till the basal infuscation almost vanishes, the black median fascia is reduced to two suboval spots, rather distant from the suture, and an apical infuscation (sometimes very faint). The females also vary greatly in colour but usually have the pale elytral spots enlarged to rather wide fasciae, of which the postmedian one is usually narrowly interrupted at the suture, but the other is continuous. Eight females that I cannot distinguish structurally from others that certainly belong to this species, have most of the under surface blackish, the prothorax reddishcastaneous, with the apex slightly infuscated, and the elytra pale except for an apical spot and a triangular infuscation about the scutellum; but many of the females having no distinctive features of the legs and abdomen, can scarcely be distinguished from females of other species; and by their colour and markings alone, many males cannot be distinguished from other species. The hind tibiae of the male from one direction appear to be moderately wide and straight, but from another they appear to be thinner, with the inner side of the apical twothirds slightly but distinctly incurved to the middle, and more or less blackish there; on A. brevicollis and A. crassipes the incurvature is much more evident (it commences as a sudden notch) and the whole tibia has an outward curve. The punctures of the head and prothorax are much sparser than on A. discoideus and A. baudinensis; the elytra of the male are not opaque, as in A. crassus; the

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rounded near apex, where the width is equal to that of head across eyes, strongly narrowed to and notched near base; with sharply defined and fairly numerous punctures, but nowhere crowded. Elytra rather elongate, shoulders gently rounded, the width across them not much more than widest part of prothorax, sides gently dilated to middle; with numerous, but not crowded, sharply defined punctures of moderate size, becoming smaller posteriorly, but distinct even at apex. Ahdomen with intercoxal process narrow and acutely triangular; apical segment with a fairly deep medio-apical incurvature. Hind tibiac rather long, apical two-thirds slightly incurved on one side. Length, 2.5—3 mm.

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# Anthicus cordicollis, n.sp.

Of a rather dingy flavous, head and prothorax flavo-ferruginous. With pubescence, short and depressed on head and prothorax, slightly longer and less depressed on elytra; the latter in addition with numerous suberect hairs.

Head large, hind angles and base moderately rounded, the latter not notched; with densely errowded punctures. Eyes small, prominent, distant from base, Antennae moderately long. Prothorax cordate, wider than long, sides strongly rounded in front and strongly diminishing in width to base; punctures as on head. Elytra elongate, elliptic-ovate, shoulders completely rounded off; with rather dense and sharply defined punctures of moderate size, becoming smaller posteriorly, the interspaces with extremely minute punctures, but scarcely shagreened. Intercoxal process of abdomen narrow and subacute. Legs moderately long. Length, 4. 25 mm.

Hab.—Western Australia: Cue (H. W. Brown).

Evidently an apterons species, at first glance apparently belonging to Formicomus, but the intereoxal process narrow and femora unarmed. The head and prothorax are opaque, mostly owing to the density of punctures; in some lights the former has a finely granulated appearance, and the latter, owing to the pubescence, appears to be finely strigose, but it is really not so.

#### FORMICOMUS.

By various works consulted Formicomus would appear to be distinguished by the body being apterous, with humeral angles completely rounded off, intercoxal process of abdomen wide and usually truncated, and hind femora strongly clavate. The majority of Australian species agree with these characters, but a few are winged, and these have the shoulders not completely rounded off, a few have the hind femora less strongly clavate than usual, and some have the intercoxal process narrower than usual, although apparently never triangular. The species are usually of large size, and usually have the hind femora dentate, or the front ones of the male only.

# FORMICOMUS QUADRIMACULATUS King.

This species varies considerably in size and colour, most specimens have the prothorax conspicuously reddish, the head infuscated, and the elytra blackish; with two reddish fasciae interrupted before the suture, and clothed with white pubescence. Sometimes the head is quite as pale as the prothorax; occasionally all parts (except the elothing) of the upper surface are blackish. King did not mention the fact, which, however, is quite apparent on several specimens from his collection, that the derm beneath the white elytral markings is usually redish; but on small dark specimens the derm of the elytra is sometimes entirely black; he also did not mention that the hind femora are strongly unidentate. On most specimens in good condition there appears, from many directions, an oblique line of whithis pubescence on each side of the prothorax, the two meeting at the

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middle of the base so as to form a distinct V. Two specimens, from Western Australia and New South Wales, have the reddish sub-basal markings on the elytra dilated to the base and suture, but leaving a fairly large, round, dark spot isolated on each side near the base; on a somewhat similar specimen from South Australia the spots are but feeble infuscations, and the punctures on the elytra are rather stronger than usual. Two unusually small specimens, with the elytral derm entirely dark, were taken at Murray Bridge from a nest of the ant, Ponera latea.

# FORMICOMUS MASTERSI King.

Syn.—F, Kingi Mael.

In general appearance this species is close to large dark specimens of F. quadrimaculatus, but differs in having the hind femora strongly and unequally hidentate, the teeth being placed side by side, the inner one larger than the outer; the prothorax is usually darker on the anterior sides than elsewhere, and has (on specimens in perfect condition) V-shaped pubescence as on the species named; there are also two similar, transverse, reddish fasciae on the elytra, interrupted before the suture, and clothed with white pubescence, but the subbasal fascia is usually more distinct than the postmedian one; occasionally both are absent or very feelbe, but the clothing covering them appears to be always conspicuous on non-abraded specimens. A cotype is in the South Australian Museum, and many specimens from Morgan and other localities on the Murray River.

Macleay described the type of F. Kingi as having the bind femora "very strongly toothed on the under-side near the apex." Six cotypes before me are bidentate; the teeth vary somewhat in size on the specimens but one is always smaller than the other; they agree perfectly with South Australian specimens of F. mastersi.

# FORMICOMUS SPECIOSUS King.

The head and prothorax (especially the latter) of this species are densely and coarsely punctured, the transverse spots or interrupted fascia (near the base of the elytra) of silvery clothing are placed within depressions, and the hind femora are strongly dentate, the teeth being placed side by side as in F. mastersi, from which it may be readily distinguished by the elytra and punctures. A specimen was taken at the Swan River, by Mr. J. Clark, from a nest of the twigmound ant, Iridomyrmex conifer.

### FORMICOMUS DENISONI King.

Syn.—F. nigripennis Champ.

A common species in North Queensland. Although King described the draw as "nigro-cyaneis" they are nearly always deep shining black, the bluish gloss being very seldom in evidence, and the head and prothorax are of a bright red; the legs, especially the front ones, vary somewhat in colour, but (except at the base of the femora) are usually black. The front femora are strongly dentate in the male, edentate in the female. The length varies from 3.25 to 4.75 mm. Some specimens from North Queensland differ from typical ones in being entirely black, except that parts of the mouth are obscurely diluted with red; one has the head, front tarsi and some of the mouth parts of a dull red, all other parts being black. F. nigripennis was described from a small male of the species.

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#### FORMICOMUS INTERRUPTUS, n.sp.

Dark reddish-brown, elytra darker, but with two pale interrupted fasciae, palpi and most of legs paler. With rather sparse, pale pubescence, but fairly dense on sides of prothorax posteriorly, dense on elytral fasciae and on sides of under surface; a few straggling hairs scattered about.

Head subovate, rather feelyl convex, hind angles moderately rounded off; with crowded and small asperate punctures, sparser (but still crowded) in front than behind; with a feeble median line. Eyes small, medio-lateral and rather prominent. Prothorax with sides widest near apex, where they are evenly rounded, then oblique but with a feeble incurvature to base; punctures much as on base of head; median line scarcely traceable. Elytra elongate-elliptic; basal half with rather dense and moderately large, sharply defined punctures, becoming very small posteriorly. Intercoxal process of abdomen rather wide and truncate. Femora stout, the hind ones strongly clavate and with a large, acutely triangular tooth. Length, 3.5—4.5 mm.

Hab.—Queensland: Townsville (F. P. Dodd),

At first glance like some of the forms of F. quadrimaculatus, but elytral punctures sparser and much more distinct on the basal half, and prothorax shorter but with somewhat similar pulsescence; the prothoracic punctures are stronger than on F. Kingi. The head and prothorax are subopaque, due entirely to the punctures; the elytral fasciae are rendered very distinct by their clothing (which, however, appears to be easily abraded), the first is at the basal third and is interrupted close to the suture, the other is at the apical third and its sutural interruption is wider. I can find no external indications of sex in the three specimens under examination.

# FORMICOMUS LATIBASIS, n.sp.

Flavous, head and prothorax somewhat ferruginous, elytra with two pale, interrupted fasciae. Rather sparsely clothed, but on the elytral fasciae and parts of under surface more densely so.

Head briefly ovate, widest almost at base, where the angles are feebly rounded off. Eyes small and medio-lateral. *Prothorax* slightly wider than long, widest and strongly rounded near apex; with a distinct, open, medio-basal fovea. Elytra elongate-ovate; with dense and minute punctures throughout, with some larger (but still small) ones becoming rather numerous towards base. Length, 4.5 mm.

Hab.—South Australia: Kilkerran (Blackburn's collection).

The type may be immature but is structurally sufficiently distinctive to be named. It is closely allied to the preceding species, with abdomen and hind femora similar, but differs in having the head decidedly wider, with the hind angles less rounded off; the prothorax is wider with the medio-basal fovca distinct (on that species it is hardly indicated), and the elytral punctures are smaller; the punctures on the head and prothorax are of the same nature, but are smaller and the median line in the former is even less distinct; its clothing is also sparser. It is also allied to F. quadrimaculatus, but the head is at least half as large again, the prothorax is shorter and with a medio-basal fove; this is one (the most distinct) of three enlargements of the sub-basal impression.

### FORMICOMUS PUBIFASCIATUS, n.sp.

Black; head, prothorax, antennae, palpi and legs more or less red. Finely pubescent, but the elytra with two interrupted fasciae of white pubescence: one at the basal third, the other at the apical third.

#### FORMICOMUS INTERRUPTUS, n.sp.

Dark reddish-brown, elytra darker, but with two pale interrupted fasciae, palpi and most of legs paler. With rather sparse, pale pubescence, but fairly dense on sides of prothorax posteriorly, dense on elytral fasciae and on sides of under surface; a few straggling hairs scattered about.

Head subovate, rather feelyl convex, hind angles moderately rounded off; with crowded and small asperate punctures, sparser (but still crowded) in front than behind; with a feeble median line. Eyes small, medio-lateral and rather prominent. Prothorax with sides widest near apex, where they are evenly rounded, then oblique but with a feeble incurvature to base; punctures much as on base of head; median line scarcely traceable. Elytra elongate-elliptic; basal half with rather dense and moderately large, sharply defined punctures, becoming very small posteriorly. Intercoxal process of abdomen rather wide and truncate. Femora stout, the hind ones strongly clavate and with a large, acutely triangular tooth. Length, 3.5—4.5 mm.

Hab.—Queensland: Townsville (F. P. Dodd),

At first glance like some of the forms of F. quadrimaculatus, but elytral punctures sparser and much more distinct on the basal half, and prothorax shorter but with somewhat similar pulsescence; the prothoracic punctures are stronger than on F. Kingi. The head and prothorax are subopaque, due entirely to the punctures; the elytral fasciae are rendered very distinct by their clothing (which, however, appears to be easily abraded), the first is at the basal third and is interrupted close to the suture, the other is at the apical third and its sutural interruption is wider. I can find no external indications of sex in the three specimens under examination.

# FORMICOMUS LATIBASIS, n.sp.

Flavous, head and prothorax somewhat ferruginous, elytra with two pale, interrupted fasciae. Rather sparsely clothed, but on the elytral fasciae and parts of under surface more densely so.

Head briefly ovate, widest almost at base, where the angles are feebly rounded off. Eyes small and medio-lateral. *Prothorax* slightly wider than long, widest and strongly rounded near apex; with a distinct, open, medio-basal fovea. Elytra elongate-ovate; with dense and minute punctures throughout, with some larger (but still small) ones becoming rather numerous towards base. Length, 4.5 mm.

Hab.—South Australia: Kilkerran (Blackburn's collection).

The type may be immature but is structurally sufficiently distinctive to be named. It is closely allied to the preceding species, with abdomen and hind femora similar, but differs in having the head decidedly wider, with the hind angles less rounded off; the prothorax is wider with the medio-basal fovca distinct (on that species it is hardly indicated), and the elytral punctures are smaller; the punctures on the head and prothorax are of the same nature, but are smaller and the median line in the former is even less distinct; its clothing is also sparser. It is also allied to F. quadrimaculatus, but the head is at least half as large again, the prothorax is shorter and with a medio-basal fove; this is one (the most distinct) of three enlargements of the sub-basal impression.

### FORMICOMUS PUBIFASCIATUS, n.sp.

Black; head, prothorax, antennae, palpi and legs more or less red. Finely pubescent, but the elytra with two interrupted fasciae of white pubescence: one at the basal third, the other at the apical third. Head rather large, from elypeus to hase scarcely as long as the greatest width; with crowded, small, asperate punctures, a few of larger size; median line faintly defined but continuous. Eyes rather small and moderately prominent. Prothorax slightly longer than wide, sides widest and strongly rounded near apex, thence oblique to base; punctures minute and densely crowded. Elytra elongate-elliptic; with dense and minute punctures. Intercoxal process of abdomen wide and truncate. Hind femora strongly clavate, strongly and acutely dentate. Length, 4 mm.

Hab.—Western Australia: Cue (H. W. Brown).

Differs from F. quadrimaculatus in the head being considerably larger, with eyes slightly nearer base; elytra slightly bronzy and with denser and more sharply defined punctures; although decidedly small, the punctures are so dense that from some directions the surface appears microscopically granulate; it is, however, somewhat shining, but the prothorax and head are opaque. The legs are paler than the prothorax, and this is paler than the head, which is somewhat infuscated in front. The elytral fasciae appear to be easily albraded, and on the type the supporting dern. is no paler than the adjacent parts.

### Formicomus melasomus, n.sp.

Black, parts of appendages reddish. With rather sparse pale pubescence, but forming two interrupted fasciae on elytra: one at the hasal third, the other at the apical third.

Head briefly ovate, hind angles rather strongly rounded off; with dense and small but, in some lights, sharply defined punctures; median line faint. Eyes small, prominent and distant from base. Prothorax slightly longer than wide, slightly narrower than head, widest and strongly rounded near apex, sides thence oblique to base; punctures much as on head; median line faint but continuous. Elytra elongate-elliptic; with minute punctures, becoming very faint posteriorly. Intereoxal process of abdomen rather wide and truncate. Hind femora strongly clavate, strongly and acutely dentate. Length, 3—3.5 mm.

Hab.—South Australia: Lucindale (B. A. Feuerheerdt), Narracoorte (A. M. Lea); Western Australia: Yilgarn (Blackburn's collection from E. Meyrick).

Structurally resembling F. quadrimaculatus on a small scale, but darker, more convex, eyes smaller, etc. The bead and prothorax are somewhat shining, despite the density of punctures, these, however, not being asperate. The antennae are reddish, but with the apical half more or less deeply infuseated; the coxae, basal half of femora, tarsi and tibiae (wholly or in part) are reddish; in some lights the derm beneath the pubescent fasciae is seen to be obscurely reddish on some specimens, but not on others. Four, of the five, specimens under examination have male genitalia exposed, and have the basal segment of abdomen less convex, and front tarsi slightly wider than on the other specimen, these being the only external indications of sex.

#### FORMICOMUS DENTIVARIUS, n.sp.

Colours variable. Rather densely clothed with fine pubescence, varying in colour with the derm; with numerous long, erect, dark hairs scattered about.

Head of moderate size, subovate, hind angles rather strongly rounded off; with dense and rather small but (except where partially concealed by elothing) sharply defined punctures. Eyes small, medio-lateral and very prominent. Prothorax transverse, distinctly wider than head, all angles widely rounded off, near



Head rather large, from elypeus to hase scarcely as long as the greatest width; with crowded, small, asperate punctures, a few of larger size; median line faintly defined but continuous. Eyes rather small and moderately prominent. Prothorax slightly longer than wide, sides widest and strongly rounded near apex, thence oblique to base; punctures minute and densely crowded. Elytra elongate-elliptic; with dense and minute punctures. Intercoxal process of abdomen wide and truncate. Hind femora strongly clavate, strongly and acutely dentate. Length, 4 mm.

Hab.—Western Australia: Cue (H. W. Brown).

Differs from F. quadrimaculatus in the head being considerably larger, with eyes slightly nearer base; elytra slightly bronzy and with denser and more sharply defined punctures; although decidedly small, the punctures are so dense that from some directions the surface appears microscopically granulate; it is, however, somewhat shining, but the prothorax and head are opaque. The legs are paler than the prothorax, and this is paler than the head, which is somewhat infuscated in front. The elytral fasciae appear to be easily albraded, and on the type the supporting dern. is no paler than the adjacent parts.

### Formicomus melasomus, n.sp.

Black, parts of appendages reddish. With rather sparse pale pubescence, but forming two interrupted fasciae on elytra: one at the hasal third, the other at the apical third.

Head briefly ovate, hind angles rather strongly rounded off; with dense and small but, in some lights, sharply defined punctures; median line faint. Eyes small, prominent and distant from base. Prothorax slightly longer than wide, slightly narrower than head, widest and strongly rounded near apex, sides thence oblique to base; punctures much as on head; median line faint but continuous. Elytra elongate-elliptic; with minute punctures, becoming very faint posteriorly. Intereoxal process of abdomen rather wide and truncate. Hind femora strongly clavate, strongly and acutely dentate. Length, 3—3.5 mm.

Hab.—South Australia: Lucindale (B. A. Feuerheerdt), Narracoorte (A. M. Lea); Western Australia: Yilgarn (Blackburn's collection from E. Meyrick).

Structurally resembling F. quadrimaculatus on a small scale, but darker, more convex, eyes smaller, etc. The bead and prothorax are somewhat shining, despite the density of punctures, these, however, not being asperate. The antennae are reddish, but with the apical half more or less deeply infuseated; the coxae, basal half of femora, tarsi and tibiae (wholly or in part) are reddish; in some lights the derm beneath the pubescent fasciae is seen to be obscurely reddish on some specimens, but not on others. Four, of the five, specimens under examination have male genitalia exposed, and have the basal segment of abdomen less convex, and front tarsi slightly wider than on the other specimen, these being the only external indications of sex.

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Colours variable. Rather densely clothed with fine pubescence, varying in colour with the derm; with numerous long, erect, dark hairs scattered about.

Head of moderate size, subovate, hind angles rather strongly rounded off; with dense and rather small but (except where partially concealed by elothing) sharply defined punctures. Eyes small, medio-lateral and very prominent. Prothorax transverse, distinctly wider than head, all angles widely rounded off, near



apex much wider than base; punctures much as on head. Elytra elliptic-ovate; with deuse and minute punctures, and with numerous larger ones, especially towards base, but all more or less obscured by elothing. Intereoxal process of abdomen not very wide, gently rounded off or almost truncate. Hind femora very stout, strongly elavate, with one strong and acute tooth, and usually with one or more smaller ones. Length, 2.5—6 mm.

Hab .- Western Australia: Cue (H. W. Brown).

Not very close to any other Australian species, except the following one and with a greater range in size than any other member of the family known to me. The teeth on the hind femora vary in number from one to four; there is a long and rather thin one inwardly, near this on the outer side there is a ridge with feeble undulations on some specimens, but on others the undulations are developed into teeth, usually small, but generally acute. On some specimens, from certain oblique directions, all four are distinct, and from an inner direction there appear 1, a long thin tooth, 2, a small one, 3, a longer but still small one, then, 4, a still smaller one or feeble tubercle; of these the 4th is the first to disappear, then the 2nd, and rarely the 3rd, the 1st being always present but varying in length. The narrowly impressed line at the base of the prothorax is not traceable across the middle from above, although distinct from the sides. The head and prothorax are both subopaque and on each a feeble median line may be traced from certain directions. All the specimens have the legs, antennae and palpi more or less reddish, but the tibiae at base and the hind femora at apex are sometimes darker than the adjacent parts; the head is black or blackish, but in front is obscurely reddish; the prothorax varies from entirely reddish (but usually with the front and front sides infuscated) to entirely blackish; the elytra are black or blackish, with the suture, sides and two interrupted zig-zag fasciae reddish, the sides and fascia clothed with white pubescence. From the side each elytron may be seen to have the pale part rather wide at the base, and narrow at the apex; from the shoulder a wide stripe projects obliquely backwards from the pale side, terminating in an acute point slightly before the middle of the elytron, with its front inner portion produced obliquely forwards, but not to the suture; at the apical third another stripe or fascia projects at a right angle inwards to near the suture, with a deep notch almost in line with the point of the sub-hasal fascia. smallest specimen has the whole of the upper surface dark, except that parts of the elytra are obscurely diluted with red, its elytral fasciae, although not distinct in themselves, are fairly indicated by the white pubescence; its hind femora are rather conspicuously infuscated near apex.

# FORMICOMUS TRIDENTIPES, n.sp.

Blackish; prothorax (front infuscated), legs, antennae and palpi reddish; under surface and parts of elytra obscurely reddish. Moderately clothed with short and mostly dark pubescence, but becoming golden on part of prothorax, and silvery on parts of elytra; in addition with numerous dark, erect hairs.

Head and prothorax with sculpture as described in preceding species, but with somewhat coarser punctures. Elytra slightly larger in proportion, and with distinctly larger punctures. Intercoxal process of abdomen wide and truneated. Hind femora strongly clavate and tridentate. Length, 5 mm.

Hab,-South Australia: Port Lincoln (A. M. Lea).

In general appearance fairly close to some specimens of the preceding species, and with the head and prothorax almost identical, except that the puncapex much wider than base; punctures much as on head. Elytra elliptic-ovate; with deuse and minute punctures, and with numerous larger ones, especially towards base, but all more or less obscured by elothing. Intereoxal process of abdomen not very wide, gently rounded off or almost truncate. Hind femora very stout, strongly elavate, with one strong and acute tooth, and usually with one or more smaller ones. Length, 2.5—6 mm.

Hab .- Western Australia: Cue (H. W. Brown).

Not very close to any other Australian species, except the following one and with a greater range in size than any other member of the family known to me. The teeth on the hind femora vary in number from one to four; there is a long and rather thin one inwardly, near this on the outer side there is a ridge with feeble undulations on some specimens, but on others the undulations are developed into teeth, usually small, but generally acute. On some specimens, from certain oblique directions, all four are distinct, and from an inner direction there appear 1, a long thin tooth, 2, a small one, 3, a longer but still small one, then, 4, a still smaller one or feeble tubercle; of these the 4th is the first to disappear, then the 2nd, and rarely the 3rd, the 1st being always present but varying in length. The narrowly impressed line at the base of the prothorax is not traceable across the middle from above, although distinct from the sides. The head and prothorax are both subopaque and on each a feeble median line may be traced from certain directions. All the specimens have the legs, antennae and palpi more or less reddish, but the tibiae at base and the hind femora at apex are sometimes darker than the adjacent parts; the head is black or blackish, but in front is obscurely reddish; the prothorax varies from entirely reddish (but usually with the front and front sides infuscated) to entirely blackish; the elytra are black or blackish, with the suture, sides and two interrupted zig-zag fasciae reddish, the sides and fascia clothed with white pubescence. From the side each elytron may be seen to have the pale part rather wide at the base, and narrow at the apex; from the shoulder a wide stripe projects obliquely backwards from the pale side, terminating in an acute point slightly before the middle of the elytron, with its front inner portion produced obliquely forwards, but not to the suture; at the apical third another stripe or fascia projects at a right angle inwards to near the suture, with a deep notch almost in line with the point of the sub-hasal fascia. smallest specimen has the whole of the upper surface dark, except that parts of the elytra are obscurely diluted with red, its elytral fasciae, although not distinct in themselves, are fairly indicated by the white pubescence; its hind femora are rather conspicuously infuscated near apex.

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Head and prothorax with sculpture as described in preceding species, but with somewhat coarser punctures. Elytra slightly larger in proportion, and with distinctly larger punctures. Intercoxal process of abdomen wide and truneated. Hind femora strongly clavate and tridentate. Length, 5 mm.

Hab,-South Australia: Port Lincoln (A. M. Lea).

In general appearance fairly close to some specimens of the preceding species, and with the head and prothorax almost identical, except that the punc-

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tures are slightly coarser, but the elytra have the reddish markings very obscure and the white pubescence clothing them differently directed, especially the subapical one, which, at its inception, instead of being directed at a right angle to the side, is directed obliquely forwards, so that if continued it would meet its fellow at the suture slightly before the middle; the sub-basal marking is curved, and on the right side is like an irregular J, the apex of the suture is also clothed with silvery pubescence; the intercoxal process of the abdomen is fully twice as wide and is truncated, it is decidedly wider than the apical segment is long (on the preceding species it is decidedly narrower than that segment is long) and the second joint of the hind tarsi is fully as long as the claw joint, instead of (as on that species) much shorter. The hind femora are tridentate, each having two acute teeth side by side (the inner longer and thinner than the outer), and a small acute one behind the inner one. The type is in perfect condition; when examining its upper surface I thought it was possibly a variety of the preceding species, but the differences in the abdomen and tarsi are conclusive; the margins and suture of its elvtra are very narrowly and obscurely reddish, and there are two obscurely reddish spots on each elytron; an angular one on each shoulder, and an irregular postmedian one.

### FORMICOMUS OBTUSIDENS, n.sp.

d. Shining black; elytra with a flavous fascia not quite touching sides or suture at basal fourth, base of antennae, coxae, base of femora and tarsi more or less obscurely reddish. With sparse, ashen pubescence, and with a few erect hairs.

Head rather small, hind angles completely rounded off to the narrow neck; with fairly dense and sharply defined punctures in front, becoming much sparser and smaller posteriorly. Eyes large, prominent and medio-lateral, slightly longer than basal joint of antennae. Antennae with eighth to tenth joints wide and triangularly dilated to apex. Prothorax much longer than wide, subglobular in front, strongly constricted near base; with fairly numerous punctures on dise, and with a feeble median line. Elytra subovate, dilated from shoulders (which are not completely rounded off) to beyond the middle, transversely depressed beneath sub-basal fovea, and with sparse and small, but fairly distinct punctures. Abdomen with intereoxal process moderately wide and feebly rounded, apical segment with a round median fovea, each side of apex deeply notched so as to expose portion of the genitalia. Femora stout and strongly clavate, front pair near base each with a long tooth dilated to and notehed at apex, front tibiae thickened and dentate near middle. Length, 3.5—4 mm.

Differs in having thinner and shorter antennae, and simple abdomen and front femora and tibiae.

Hab.—Northern Territory: Melville Island (W. D. Dodd).

The intereoxal process of the abdomen is less conspienously truncated than is usual in Formicomus, and wings are present, in consequence of which the shoulders are less rounded off than is usual; but as the femora are strongly clavate and the species is certainly congeneric with F. agilis, which is also winged, it was referred to Formicomus. From F. agilis, to which at first glance it appears to belong, it differs in the prothorax having a very feeble median line instead of a deep groove, and the tooth of the front femora of the male longer and of different shape. The head, behind the eyes, is almost semicircular in outline; on most of the specimens from the island it is deep black, but on several it is dark reddish-brown; on such specimens the antennae and legs are also somewhat paler.

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tures are slightly coarser, but the elytra have the reddish markings very obscure and the white pubescence clothing them differently directed, especially the subapical one, which, at its inception, instead of being directed at a right angle to the side, is directed obliquely forwards, so that if continued it would meet its fellow at the suture slightly before the middle; the sub-basal marking is curved, and on the right side is like an irregular J, the apex of the suture is also clothed with silvery pubescence; the intercoxal process of the abdomen is fully twice as wide and is truncated, it is decidedly wider than the apical segment is long (on the preceding species it is decidedly narrower than that segment is long) and the second joint of the hind tarsi is fully as long as the claw joint, instead of (as on that species) much shorter. The hind femora are tridentate, each having two acute teeth side by side (the inner longer and thinner than the outer), and a small acute one behind the inner one. The type is in perfect condition; when examining its upper surface I thought it was possibly a variety of the preceding species, but the differences in the abdomen and tarsi are conclusive; the margins and suture of its elvtra are very narrowly and obscurely reddish, and there are two obscurely reddish spots on each elytron; an angular one on each shoulder, and an irregular postmedian one.

### FORMICOMUS OBTUSIDENS, n.sp.

d. Shining black; elytra with a flavous fascia not quite touching sides or suture at basal fourth, base of antennae, coxae, base of femora and tarsi more or less obscurely reddish. With sparse, ashen pubescence, and with a few erect hairs.

Head rather small, hind angles completely rounded off to the narrow neck; with fairly dense and sharply defined punctures in front, becoming much sparser and smaller posteriorly. Eyes large, prominent and medio-lateral, slightly longer than basal joint of antennae. Antennae with eighth to tenth joints wide and triangularly dilated to apex. Prothorax much longer than wide, subglobular in front, strongly constricted near base; with fairly numerous punctures on dise, and with a feeble median line. Elytra subovate, dilated from shoulders (which are not completely rounded off) to beyond the middle, transversely depressed beneath sub-basal fovea, and with sparse and small, but fairly distinct punctures. Abdomen with intereoxal process moderately wide and feebly rounded, apical segment with a round median fovea, each side of apex deeply notched so as to expose portion of the genitalia. Femora stout and strongly clavate, front pair near base each with a long tooth dilated to and notehed at apex, front tibiae thickened and dentate near middle. Length, 3.5—4 mm.

Differs in having thinner and shorter antennae, and simple abdomen and front femora and tibiae.

Hab.—Northern Territory: Melville Island (W. D. Dodd).

The intereoxal process of the abdomen is less conspienously truncated than is usual in Formicomus, and wings are present, in consequence of which the shoulders are less rounded off than is usual; but as the femora are strongly clavate and the species is certainly congeneric with F. agilis, which is also winged, it was referred to Formicomus. From F. agilis, to which at first glance it appears to belong, it differs in the prothorax having a very feeble median line instead of a deep groove, and the tooth of the front femora of the male longer and of different shape. The head, behind the eyes, is almost semicircular in outline; on most of the specimens from the island it is deep black, but on several it is dark reddish-brown; on such specimens the antennae and legs are also somewhat paler.

## FORMICOMUS ACUTIDENS, n.sp.

 Black; basal joints of antennae obscurely reddish, coxae and base of femora flavous.

Head subglobular; with crowded but fairly sharply defined punctures about base, but less distinct in front, owing to the intermixture of smaller ones. Eyes rather small, medio-lateral and prominent. Antennae slightly thickened towards apex. Prothorax distinctly longer than wide, front two-thirds globular, the basal third much narrower; with a few inconspicuous punctures along middle; median line very faint. Elytra elliptic-ovate, sides somewhat dilated to middle, shoulders fairly prominent; punctures sparse and minute. Abdomen with inter-coxal process rather wide and gently rounded, apieal segment irregular on each side of and depressed in middle. Femora strongly clavate, front pair each with a long and acute median tooth; front tibiae notched near apex, hind tibiae long, thin and rather strongly curved. Length, 3 mm.

Hab,-Queensland: Cairns District (A. M. Lea).

The presence of wings, strongly dentate front femora of male, and shoulders not completely rounded off, associate this species with the preceding, and with  $F.\ agilis$ , from which it is at once distinguished by the absence of a flavous fascia in a sub-basal depression on the elytra; the hind tibiae are also decidedly longer and more strongly curved than on those species and the cephalic punctures are different; in its scarcely visible median line it is nearer the preceding species than agilis, but its femoral tooth is an acute spine.

### FORMICOMUS ALATUS, n.sp.

Black, shining; parts of three basal joints of antennae, parts of femora, of tarsi and of palpi more or less reddish. With fairly numerous, dark, erect hairs, mixed on the elytra with sparse, pale pubescence.

Head subovate, bind angles and base completely rounded off; with rather sparse and small, but sharply defined punctures, becoming larger and somewhat erowded in and about some frontal impressions. Eyes prominent, medio-lateral and rather large. Antennae long. Prothorax longer than wide, sides strongly rounded and widest near apex, notched near lase; upper surface with rather dense and sharply defined but asperate punctures, flanks almost impunctate. Elytra much wider than prothorax, sides of base oblique to shoulders, sides gently dilated to beyond middle; punctures sparse and minute. Intercoxal process of abdomen not very wide and gently rounded (almost truncate). Femora stout, the hind ones strongly clavate. Length, 3.5 mm.

Hab.—Queensland; Cooktown (H. Hacker), Darnley Island (H. Elgner).

A deep black, winged species, evidently allied to F. obtasidens and F. acutidens; each of the two specimens under examination is a female; they differ from the females of the former species in having the elytra of uniform colour, and no joint of antennae transverse (even the tenth is slightly longer than its apical width), from the latter species (apart from differences which are certainly sexual) in having the head larger, with much sparser punctures, the prothorax with much denser and coarser punctures, and the elytra without a postmedian fascia of pubsescence.

### Tomoderus uniformis, n.sp.

Flavous. Moderately clothed with depressed, pale pubescence, interspersed with some subcreet setae.

## FORMICOMUS ACUTIDENS, n.sp.

 Black; basal joints of antennae obscurely reddish, coxae and base of femora flavous.

Head subglobular; with crowded but fairly sharply defined punctures about base, but less distinct in front, owing to the intermixture of smaller ones. Eyes rather small, medio-lateral and prominent. Antennae slightly thickened towards apex. Prothorax distinctly longer than wide, front two-thirds globular, the basal third much narrower; with a few inconspicuous punctures along middle; median line very faint. Elytra elliptic-ovate, sides somewhat dilated to middle, shoulders fairly prominent; punctures sparse and minute. Abdomen with inter-coxal process rather wide and gently rounded, apieal segment irregular on each side of and depressed in middle. Femora strongly clavate, front pair each with a long and acute median tooth; front tibiae notched near apex, hind tibiae long, thin and rather strongly curved. Length, 3 mm.

Hab,-Queensland: Cairns District (A. M. Lea).

The presence of wings, strongly dentate front femora of male, and shoulders not completely rounded off, associate this species with the preceding, and with  $F.\ agilis$ , from which it is at once distinguished by the absence of a flavous fascia in a sub-basal depression on the elytra; the hind tibiae are also decidedly longer and more strongly curved than on those species and the cephalic punctures are different; in its scarcely visible median line it is nearer the preceding species than agilis, but its femoral tooth is an acute spine.

### FORMICOMUS ALATUS, n.sp.

Black, shining; parts of three basal joints of antennae, parts of femora, of tarsi and of palpi more or less reddish. With fairly numerous, dark, erect hairs, mixed on the elytra with sparse, pale pubescence.

Head subovate, bind angles and base completely rounded off; with rather sparse and small, but sharply defined punctures, becoming larger and somewhat erowded in and about some frontal impressions. Eyes prominent, medio-lateral and rather large. Antennae long. Prothorax longer than wide, sides strongly rounded and widest near apex, notched near lase; upper surface with rather dense and sharply defined but asperate punctures, flanks almost impunctate. Elytra much wider than prothorax, sides of base oblique to shoulders, sides gently dilated to beyond middle; punctures sparse and minute. Intercoxal process of abdomen not very wide and gently rounded (almost truncate). Femora stout, the hind ones strongly clavate. Length, 3.5 mm.

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### Tomoderus uniformis, n.sp.

Flavous. Moderately clothed with depressed, pale pubescence, interspersed with some subcreet setae.

Head distinctly transverse, hind angles strongly rounded off; with dense and sharply defined punctures, becoming snaller in front, with two snall inter-ocular impressions, appearing like large punctures; basal slope with a shallow median line. Eyes large and prominent. Antennae moderately long, most of the joints submoniliform; eleventh as long as ninth and tenth combined. Prothorax about as long as its greatest width, sides strongly rounded and widest near apex, where the width is equal to that of head, deeply constricted towards base; densely and rather strongly punctate, and with a conspicuous median line. Elytra almost parallel-sided, shoulders moderately rounded; with rather dense and large, scriate punctures about base, rapidly becoming smaller and almost disappearing on apical slope. Hind legs long and thin, the others shorter. Length, 2—2, 25 mm.

Hab.—Victoria: Mooroopna, in April (F. E. Wilson), Geelong (H. W.

Davey).

Distinguished from T. leave by its larger size and dense and sharply defined punetures on head and prothorax; T. denticollis is described as having minute scattered punetures on those parts. As there is a foveate impression on the apical segment of abdomen, on the three specimens under examination, they are presumably all males.

## TRICHANANCA APTERA, n.sp.

Piceous-brown, under surface somewhat paler, legs and palpi flavous, knees, tarsi and antennae slightly darker. Clothed with rather sparse, pale pubescence, and with numerous suberect, dark hairs.

Head moderately large and, excluding mouth parts, distinctly transverse, base strongly rounded, with rather small and sparse, unevenly distributed punctures. Antennae rather long and moderately stout, eleventh joint as long as ninth and tenth combined. Prothorax distinctly longer than wide, strongly constricted at basal third, with an irregular median line; coarsely and irregularly punctate, or granulate. Elytra rather narrow, shoulders rounded, sides gently dilated to beyond the middle; with rows of large, suboblong punctures, close together near base, smaller posteriorly, and feeble about apex. Legs rather long and stout. Length, 4–4,5 mm.

Hab.—Queensland: Mount Tambourine, two specimens from rotting leaves (A. M. Lea), Brishane.

An apterous species; the only previously described apterous one is T. coxcolor, from which it differs in being darker, in having the head less transverse,
with smaller punetures, and longer and thinner antennae, the prothorax is also
decidedly longer, with narrower median line, and different punetures. Structurally, except for the want of wings, it seems near T. pisoniae, but the shoulders
are more rounded off, and consequently not so much wider than the base of the
prothorax. On one specimen the elytra have a faint coppery-green gloss.

## TRICHANANCA MICROMELAS, n.sp.

9. Black; antennae, coxae, trochanters and knees rather obscurely reddish, palpi and tarsi paler. With rather sparse, pale pubescence, interspersed with darker, subcreet bairs.

Head (excluding neck) distinctly transverse, hind angles rounded off; with sparse and small punctures; a shallow depression each side in front. Antennae rather long and thin, eleventh joint as long as minth and tenth combined. Prothorax about as long as its greatest width, front sides strongly inflated and disHead distinctly transverse, hind angles strongly rounded off; with dense and sharply defined punctures, becoming snaller in front, with two snall inter-ocular impressions, appearing like large punctures; basal slope with a shallow median line. Eyes large and prominent. Antennae moderately long, most of the joints submoniliform; eleventh as long as ninth and tenth combined. Prothorax about as long as its greatest width, sides strongly rounded and widest near apex, where the width is equal to that of head, deeply constricted towards base; densely and rather strongly punctate, and with a conspicuous median line. Elytra almost parallel-sided, shoulders moderately rounded; with rather dense and large, scriate punctures about base, rapidly becoming smaller and almost disappearing on apical slope. Hind legs long and thin, the others shorter. Length, 2—2, 25 mm.

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Hab.—Victoria: South Gippsland (H. W. Davey). Unique.

A black, apterous species, and the smallest of the genus; from the other apterous species, *T. concolor* and *T. aptera*, it may be distinguished by its small size, dark colour, and by the almost complete absence of a median prothoracic line; from most directions, indeed, it appears to he really absent, and it is only in certain lights, and from oblique directions, that a faint line may be traced.

### MECYNOTARSUS.

Of the described Australian species of this genus apicipennis, kreusleri and mastersi are abundantly distinct. At first glance the processes on the margin of the prothoracic projection would appear to be of considerable use in distinguishing species, but on siezae they certainly vary in number, usually being eleven (five on each side and an apical one), very rarely nine; on some specimens they are thirteen, and even fifteen, owing to minute supplementary ones at the hase; on amabilis they are usually nine, but occasionally eleven; on albellus they are nearly always eleven; on my specimens of concolor nine. The clothing on all these latter is variable; on albellus it is usually of a snowy whiteness, but on marbilis, oneolor and sizeae the elytral scales are mostly white, with pale brown markings of varying shades of colour, and varying from covering much of the surface to covering so little and the colour so faint that it is difficult to distinguish them from albellus. Consequently I have set aside many specimens which may belong to unnamed species, but which it is not desirable to name as new.

### MECYNOTARSUS KINGI Macl.

A Gayndah specimen labelled by Olliff as M. kingi, agrees with the type of M. amabilis, although Macleay made no mention of elytral markings.

# MECYNOTARSUS MACULATUS, n.sp.

Pale castaneous, legs and antennae flavous. Densely clothed with white, subsquamose pubescence, sparser on prothoracic projection than elsewhere, its under surface sparsely pubescent, elytra with two or three pale yellowish spots. Length, 2.5—2.75 mm.

Hab.—Tasmania: Hobart (A. M. Lea); New South Wales: Sydney (H. W. Cox); Northern Queensland (Blackburn's collection); South Australia: Port Lincoln (Lea).

Structurally close to M. ziezac, but each elytron with two or three disconnected spots (on that species the median markings are more extended and are connected along the suture with sub-basal and subapical markings); the spots are not as dark as the derm on which they rest, but as this is normally concealed they are distinct; there is one near the middle of each elytron, nearer the suture than side, usually transversely subtriangular, with the wide end near the suture (which it never appears to toneh), but occasionally it is semi-double; on the suture close to apex there is often a similarly coloured spot but seldom sharply defined, and often entirely absent. The prothorax is about the shape of that of siczac, but the tubercles on the outer edge of its process are usually nine in num-

tinctly wider than head, strongly constricted near basal third; with rather dense and sharply defined punctures, becoming smaller in front; flattened along middle. Elytra thin, elongate-elliptic, shoulders rounded off; with scriate punctures large and close together about base, rapidly getting smaller and almost disappearing about apex. Length, 3 mm.

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ber (occasionally eleven), the apical one is sometimes semidouble, and rarely appears as two. The elytra are evenly convex without a sub-basal depression, and the hind tarsi are slightly longer than the tibiae. The male differs from the female in having the abdomen smaller, less convex, and with the apex notched.

## MECYNOTARSUS HORTENSIS, n.sp.

Derm normally concealed but mostly dark reddish-brown, under surface paler, legs, antennae and palpi more or less flavous. Densely elothed with subsquamose pubescence, silvery white on under surface and legs, variegated on upper surface. Length, 2—2.5 mm.

Hab.—Western Australia: Swan River, common in gardens (A. M. Lea).

With about the same range of size as in M. siczac, but elytral markings darker, more sharply defined and somewhat different in pattern, and average number of tubereles on prothoracie process less. On the upper surface the pale scales are usually darker than on the under surface; on the prothorax there are usually two ill-defined dark spots at the base; on the elytra there is a conspicuous brown, or purplish-brown median fascia, not touching sides or suture, and with more or less jagged outlines, occasionally the part on each elytron is obscurely connected along, but not on, the suture, with a less distinct basal infuscation, beyond the middle the suture is narrowly dark, and then the dark part suddenly dilates to a large and almost circular apical spot. There are usually nine tubercles on the outer edge of the prothoracie process, but on several specimens the two basal ones on one side are sometimes conjoined so that there appear to be but three on one side.

# MECYNOTARSUS PHANOPHILUS, n.sp.

Flavo-castaneous, head and prothorax darker, legs, antennae and palpi paler. Densely clothed with white or whitish pubescence, on the elytra variegated with median and subanical markines. Leneth. 2,75 mm.

Hab,-Queensland: Cairns District, to light (A. M. Lea).

At first glance like some varieties of  $M.\ siczac$ , but prothorax with only ninc and the part of the prothorax behind it distinctly transverse, with its greatest width very little less than that of the base of the elytra; lines drawn to connect the apical tubercle with the basal one on each side, and these with each other, would represent an equilateral triangle; on siczac the triangle would be a narrower one, and the outer lines somewhat rounded. On the only two specimens taken, the clothing being in perfect condition, the surface has not been abraded to be sure as to the colour of the derm, although it is evident that the elytra are paler than the rest of the upper surface, but the tubercles on the prothoracic process are (except for sparse pubescence) glabrous, and dark castaneous. On the prothoract he elothing is denser and more uniform than on the elytra, on the latter there are four pale brown spots (disconnected on one specimen, connected two and two on the other) representing a median fascia, and a short line directed obliquely backwards on each side from the suture at the apical fourth.

#### MECYNOTARSUS LATEROALBUS, n.Sp.

Dark castaneous, parts beneath the pale clothing paler, legs, antennae and palpi paler. Upper surface with dense chocolate-brown clothing, slightly varies gated on prothorax, and with two conspicuous white patches on the side of each elytron; under surface and legs with white clothing. Length, 2.5—2.75 mm.

ber (occasionally eleven), the apical one is sometimes semidouble, and rarely appears as two. The elytra are evenly convex without a sub-basal depression, and the hind tarsi are slightly longer than the tibiae. The male differs from the female in having the abdomen smaller, less convex, and with the apex notched.

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Hab.—South Australia: Mount Painter (H. G. Stokes), Parachilna (H. M. Hale); Western Australia: Cue (H. W. Brown).

À beautiful species, with prothorax (except for the tubercles) and legs scalptured as on M. ziczac, but the clytra with very different clothing; on one specimen from above they appear to be entirely dark, except that the inner tips of the pale lateral spots are just perceptible, on the others they are continued across about half of the disc, and are narrowly connected on the margin. The three specimens under examination quite evidently belong to but one species, but on one specimen there are nine tubercles on the outer edge of the prothoracie process, on the second specimen two of the tubercles on each side are conjoined, and on the other, three on each side are conjoined so that it has a medio-apical tubercle, a tubercle on each side near it, and then a ridge to the base on each side.

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